# ANTS FROM HONDURAS AND GUATEMALA.

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#### INTRODUCTION.

Most of the ants listed and described in this paper were collected by the writer during February and March, 1920, in Honduras, chiefly along the coast and in the near-by mountains between Ceiba and Tela. A few species from Guatemala, given to me by Prof. W. M. Wheeler, are included.

With the exception of *Eciton morosus*, var. payarum Forel, there are, as far as I can find, no previous records of ants from Honduras. The object of my visit was chiefly economic; not a great deal of time could be devoted to ant collecting and most of such time was spent in the deep woods overturning stones and logs, so the majority of the species noted are from these situations, and the collection therefore lacks many forms which would have been taken had more attention been paid to twig-dwellers and other tree-inhabiting ants.

Among the more interesting species described are a new *Thaumatomyrmex* and an *Acanthognathus*, both genera new to the Central American fauna and known before only by one South American species each, a new genus (*Opisthoscyphus*), related to *Alfaria*, and two aberrant myrmecines which I place, provisionally, in the genus *Stenamma*.

I am much indebted to the Vacarro Brothers of New Orleans and Ceiba, who furnished steamship passage from New Orleans to Ceiba and return, as well as transportation on their railroad in Honduras and accommodations at several of their plantations and to the officials of the United Fruit Company for similar courtesies and assistance on their estates.

Professor Wheeler kindly gave me the freedom of his collection for comparison and Professor Emery examined and compared with types in his collection several species of which I was doubtful.

#### DESCRIPTION OF SPECIES.

# Subfamily CERAPACHINAE.

CERAPACHYS (PARASYSCIA) HONDURIANUS, new species.

Worker.—Length 2.75–3 mm.

Head one-fourth longer than broad, a little broader behind than in front, with slightly convex sides and broadly and shallowly concave

posterior border. Antennal scapes short and thick, extending less than two-thirds the distance to occipital corners; funicular joints, except the terminal, transverse, terminal joint as long as the four preceding joints together. Thorax in profile very feebly convex; from above, two and one-half times as long as broad, very slightly broader behind than in front. Petiole from above as broad as long; in profile a little higher than long, as broad in front as behind. Postpetiole about one-fourth broader than the petiole, narrower in front than behind.

Sublucid, the terminal funicular joints and the legs shining. Head and body coarsely and closely punctate and reticulate, the punctation of the head more coarse and dense than that of the thorax and

abdomen.

Silky, erect pile scattered on head, body and appendages.

Color brownish red to dark brown, terminal joint of antennae and the legs lighter.

Female.-Length 4 mm.

Head somewhat shorter than in the worker. Eyes little convex, situated at middle of sides of head. Thorax nearly flat. Pronotum less than one-half as long as mesothorax. Scutellum much broader than long. Base of epinotum a little shorter than the declivity. Petiole from above distinctly broader than long.

Sculpture as in worker, except that the punctures of the mesonotum and scutellum are smaller and more separated, with the spaces between nearly smooth.

Type locality.—Honduras: Lombardia. Cotypes.—Cat. No. 24432, U.S.N.M.

One small colony was taken beneath a stone.

This, the third American species of the subgenus *Parasyscia*, is very near *P. toltecus* Forel from Guatemala, but my specimens differ from cotypes in the National collection in having the antennal scapes thicker apically, in the proportionately broader petiole and in sculpture. In *toltecus* the punctures on the thoracic dorsum are much more sparse, and the space between is rather smooth and shining; in *hondurianus* they are larger and closer together and without smooth spaces between.

# Subfamily Ponerinae. PRIONOPELTA MAYRI Forel.

Honduras: Cecilia, San Juan Pueblo, Lombardia.

Occurs in small colonies in humid localities beneath stones or in rotten wood.

#### TYPHLOMYRMEN ROBUSTUS Emery.

Honduras: Cecilia, San Juan Pueblo, Lombardia.

The colonies are found beneath bark, where the workers run in file along narrow passageways, very similar to those of certain species of *Vollenhovia*.

Among individuals from the same colony is considerable variation in size, from 2.75 mm. to 4.25 mm. My workers, though smaller in size than the type specimens, appear otherwise identical.

# GNAMPTOGENYS MORDAX (F. Smith).

Honduras: San Juan Pueblo.

The two colonies found were in partly rotten logs, nesting in burrows made by wood-boring insects. My workers agree with a Brazilian specimen from Emery's collection and differ from Smith's description in having the second gastric segment not striate, but regularly, sparsely, and rather coarsely punctate.

# GNAMPTOGENYS REGULARE Mayr.

Honduras: Ceiba, Cecilia, San Juan Pueblo, Lombardia.

The commonest species of its genus in the districts visited. A favorite nesting site is beneath the bases of palm fronds.

# GNAMPTOGENYS TORNATUM (Roger).

Honduras: Ceiba, San Pedro Sula.

# GNAMPTOGENYS ANNULATUM Mayr.

Honduras: Cecelia, Lombardia, Tela.

#### GNAMPTOGENYS INTERRUPTUM Mayr.

Honduras: Lombardia.

One colony was found beneath bark on a rotting log.

## THAUMATOMYRMEX FEROX, new species.

Worker.—Length 4.75 mm. (fig. 1).

Head distinctly broader than long and much broader in front than behind, sides in back of eyes and the posterior border rounded, sides

in front of eyes projecting as lobes which are slightly shorter than the longitudinal diameter of the eye. Clypeus depressed and flat, broadly rounded anteriorly. Mandibles longer than the head, very slender and spiniform, at basal third with two very long spines, the first of which is swollen at base and slightly curved at tip, the second much longer than the first and feebly sinuate. Frontal carinae thick, moderately elevated and projecting forward beyond

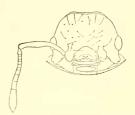


FIG. 1.—THAUMATOMYRMEX FE-ROY, NEW SPECIES. HEAD OF WORKER.

the anterior border of clypeus. Antennal scapes surpassing the occipital corners by a little less than one-third their length, bent at basal three-eighths, moderately thickened apically; first funicular

joint as long as the second and third together; joints 2-7 transverse; club very poorly defined, with the terminal joint nearly as long as the three preceding joints together. Eyes large and convex, situated in front of middle of sides of head. Pronotum broader than long, sides strongly convex, dorsum nearly flat. Promesonotal and mesoepinotal sutures strongly impressed. Mesonotum about one-fifth as long as pronotum, with moderately convex surface. Basal and declivous portions of epinotum equal in length, rounding into each other; the surface of the base broadly convex, of the declivity, flat. Petiole thick wedge-shape, higher than long, rounded above, anterior surface moderately convex, posterior surface flat. Gaster large and thick, longer than the thorax; sting short and thick. Legs not incrassate.

Shining, with fine punctures, each bearing a long and rather coarse hair, rather sparsely distributed on head and body and mandibles. Appendages with fine, short, recumbent hairs.

Color black; mandibles and antennae reddish brown, with the tips of the antennae lighter; anterior femora, except the bases and tips, apical halves of middle and posterior femora, the tips of the tibiae and all of the tarsi reddish brown, remainder of legs honey yellow.

Type locality.—Honduras: San Juan Pueblo.

Cotypes.—Cat. No. 24433, U.S.N.M.

Described from two workers that were taken with one larva and a pupa in a depression in a half rotten log near a stream in the forest. Though I searched intensively in this and in similar localities for

more specimens I did not find the species again.

Th. ferox is the second species of this striking genus. Th. mutilatus described by Mayr from workers from Santa Catherina, Brazil, and since rediscovered in the same locality by Von Ihering has the head much longer in proportion to its breadth, the cheeks do not project, the mandibles are shorter with the spines less developed and the antennal joints are shorter. The structure of the thorax and abdomen in the two species is very similar.

#### HOLCOPONERA STRIGATA Norton.

Honduras: Lombardia.

## OPISTHOSCYPHUS, new genus.

Worker.—Allied to Alfaria Emery.

Head subquadrate. Mandibles elongate, composed of a thickened near portion, on the inner side of which is a lamellate plate that gives the whole an elongate trigonal appearance. Clypeus short and broad, anterior portion horizontal, posterior portion broad, extending as an irregular impression between the frontal carinae but not

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separated from them by a suture. Frontal area strongly impressed, not definitely outlined. Frontal carinae short, their lobes well developed, flattened, longer than broad and broader than their distance apart, extending forward as far as the anterior border of clypeus; at sides somewhat bent inward, broadly covering the antennal insertions.

Antennae 12-jointed, stout, the scape short, gradually thickened distally; funiculus thickened toward tip, with the terminal joint as long as the two preceding joints. Eyes distinct, but small and composed of few facets, situated at sides of head a little behind the middle. Thorax robust. without sutures above, unarmed, inferior angles of prothorax pointed; spiracles on sides of epinotal declivity very large. Petiole elongate, rounded, with a moderate-sized anteroventral tooth. Second gastric segment as long as the first and distinctly



FIG. 2.—OPISTHOSCY-PHUS SCABROSUS, NEW SPECIES. HEAD OF WORKER.

broader; remaining segments small and extending as a cone downward and forward. Tarsal claws simple. Anterior tibial spur strongly pectinate. Middle and posterior tibiae with a single very fine spur.

Genotype.—Opisthoscyphus scabrosus, new species.

#### OPISTHOSCYPHUS SCABROSUS, new species.

Worker.—Length, 2.75 mm. (figs. 2-3).

Head one-fifth longer than broad, a little narrowed in front, with nearly straight sides and posterior border and rounded occipital cor-

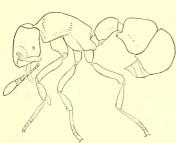


Fig. 3.—Opisthoscyphus scabrosus, new species. Lateral view of worker.

ners. Lamellate portion of mandibular blades at base with three small, separated denticles and anterior to these indistinctly denticulate. Antennal scapes extending four-fifths the distance to occipital corners; funicular joints 2–10 transverse, each larger than the preceding joint. Thorax little convex above, broadest in front of middle of pronotal region and somewhat constructed at sides between meso- and epi-notum.

Petiole from above a little longer than broad, sides moderately convex; in profile broadly convex above, longer than high.

Opaque, mandibles and appendages somewhat shining. Mandibles coarsely striate longitudinally. Head and body densely and rugosely punctate and with regular reticulae.

Hairs fine and silky, moderately abundant on head, body, and appendages; antennae and legs with coarser and longer hairs.

Color reddish brown, appendages lighter; hairs golden yellow.

Type locality.—Honduras: Lombardia.

Type.—Cat. No. 24434, U.S.N.M.

Described from a single worker that was found beneath a stone that sheltered also a small colony of *Cerapachys* (*Parasyscia*) hondurianus.

Because of the curious structure of the mandibles this species can not be included in the genus Alfaria, the workers of which have typical trigonal mandibles. The mandibles of Opisthoscyphus appear to be essentially linear, though the lamellate expansion at the apical half of the blades give them superficially an elongate-trigonal appearance. The two genera are similar in habitus, and the latter may possibly be later considered merely of subgeneric value.

## ECTATOMMA (ECTATOMMA) TUBERCULATUM (Olivier).

Honduras:

Found in all wooded localities.

## ESTATOMMA (ECTATOMMA) RUIDUM Roger.

Generally distributed and moderately common in all localities visited in Honduras.

#### PROCERATIUM MANCUM, new species.

Worker .- Length 2 mm.

Head a little longer than broad, slightly narrowed in front, sides a little convex; occipital corners broadly rounded, border feebly concave; median carinae fine, but distinct for entire length of front and vertex. Mandibular blades with six short, stout teeth. Clypeus between frontal carinae flat, more than twice as long as broad. Frontal carinae short and thin, moderately elevated and rounded posterior to middle. Antennal scapes narrowed basally and strongly incrassate at apical half, extending about two-thirds the distance to occipital corners, first funicular joint broader than long and a little longer than the second, remaining joints, except the terminal, strongly transverse, terminal joint as long as the four joints preceding. Eve at middle of sides of head, barely discernible. Thorax broadest at humeri, which are narrowly rounded, inferior angles obtusely angulate. Angle between base and declivity of epinotum with a strong broadly triangular spine; declivous surface concave above, flat beneath. Node in profile subquadrate, twice as high as long, with nearly straight anterior and posterior surfaces and slightly convex dorsum; from above, twice as broad as long, distinctly narrower than base of first gastric segment. Front of head rather

coarsely punctate and less shining than the remainder of head and the thorax, which are more finely shallowly punctate.

Head, body, and appendages with abundant, fine, silky, semirecumbent vellow pilosity.

Color brownish red.

Female.—(deälated). Length 2.25 mm.

Similar in structure to worker, with the petiole a little shorter and thicker and the epinotal spines more blunt.

Type locality.—Honduras: Cecilia.

Type.—Cat. No. 24435, U.S.N.M.

Described from a single worker and one female found beneath a

This is the first species of the genus to be described from Central America. It is more closely related to *crassicorne* Emery, than to the more southern *croceum* Emery, differing from the former in its thicker and shorter petiolar node, more pronounced epininotal spines and in the much finer sculpture of the head and thorax.

#### PLATYTHYREA PUNCTATA F. Smith.

Honduras: Ceiba, San Juan Pueblo, Lombardia.

NEOPONERA VILLOSA (Fabricius), subspecies INVERSA (F. Smith).

Honduras: Ceiba.

One colony with larvae and pupae was found in a hollow log. Though able to sting severely, the workers are exceedingly timid.

NEOPONERA OBSCURICORNIS (Latreille), variety LATREILLEI Forel.

Honduras: Progresso, Carmelina, San Juan Pueblo, Ceiba, Choloma.

NEOPONERA APICALIS (Latreille).

Honduras: Lombardia, San Juan Pueblo.

NEOPONERA UNIDENTATA (Mayr).

Honduras: Lombardia, San Juan Pueblo, Progresso.

NEOPONERA CARINULATA (Roger), subspecies GIBBINOTA Forel.

Honduras: Lombardia.

NEOPONERA CRENATA (Roger).

Honduras: Ignacio.

Nesting in a hollow twig.

PACHYCONDYLA (PACHYCONDYLA) HARPAX (Fabricius).

Honduras: Progresso, Lombardia, Carmelina, Ceiba, Cecilia, San Juan Pueblo.

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## EUPONERA (NESOPONERA) CONSTRICTA (Mayr).

Honduras: San Pedro Sula, Cecilia, Progresso, Lombardia.

#### EUPONERA (TRACHYMESOPUS) CAUTA, new species.

Worker.—Length 3.25-3.50 mm.

Head a little longer than broad, slightly narrower in front than behind; sides feebly convex, occipital border shallowly concave. Mandibles with five rather stout, triangular teeth. Clypeus very broadly rounded at anterior border. Eyes distinct, flat, oval, their distance from anterior border of cheeks equal to one and three-fourths times their longitudinal diameter. Antennal scapes almost attaining occipital corners; first funicular joint as long as joints 2–3 together; second joint longer than broad, remaining joints gradually increasing in breadth; terminal as long as the two preceding joints together. Thorax much as in cognata Emery. Basal portion of epinotum a little longer than the declivity, the angle between the two surfaces narrowly rounded. Petiolar node high, little narrowed above, anterior surface convex, posterior surface flat; from above, very much broader than long.

Mandibles shining, with sparse and strong punctures and a few delicate striolae. Head and body densely punctate, the gaster moderately shining, head and thorax subopaque: legs and antennal scapes moderately shining. Erect hairs fine, white in color and sparse on head and thorax, more abundant on gaster. Pubescence not very thickly distributed on head, body, and appendages.

Color dark reddish brown to black; appendages lighter.

Type locality.—Honduras: Lombardia. Cotypes.—Cat. No. 24436, U.S.N.M.

Described from several workers from a colony found in rotten wood-

This species is distinctly smaller in size than the other American species. It is most closely related to cognata Emery, which species is larger, darker in color, with shorter head, stouter antennal scapes, and larger eyes, and the mandibular blades are armed with seven teeth considerably larger than in cauta.

#### EUPONERA (TRACHYMESOPUS) STIGMA Fabricius.

Honduras: San Juan Pueblo, Ceiba.

## PONERA PERPLEXA, new species.

Worker.—Length, 3.75-4 mm.

Head a little longer than broad, narrower in front than behind, sides slightly convex, posterior border broadly and shallowly concave. Mandibles stout, their blades with a series of small, closely

set, irregular teeth, with two somewhat larger, near the tips. Eyes small, composed of four distinct facets, situated at anterior fourth of sides of head. Antennal scapes slightly surpassing occipital corners, first funicular joint a little shorter than the second and third together, joints 2–10 about as long as broad, terminal joint as long as the two preceding joints together. Pronotum as long as broad, sides and humeri broadly rounded. Mesoëpinotal suture distinctly, though narrowly, impressed. Basal portion of epinotum as long as the declivity, convex in front, flattened behind; declivity flat, obtusely margined at sides. Node in profile high, moderately narrowed above, anterior surface feebly convex, posterior surface flat; from above, strongly transverse, rounded at sides. Gaster rather stout.

Shining, finely and shallowly punctate throughout, with not very thick pruinose pubescence and very sparse, short, erect hairs on head and thorax, more abundant and longer on gaster.

Dark reddish brown to black; appendages and antennal funiculi lighter.

Type locality.—Honduras: Ceiba, Lombardia, Cecilia.

Cotupe.—Cat. No. 24437, U.S.N.M.

Described from a small series from several colonies found beneath bark or stones.

In the form of the body this species closely resembles *P. foreli* Mayr from Brazil. It has, however, much smaller eyes than *foreli* and the pilosity is sparser. From *distinguenda* Emery it differs in the relatively broader mesonotum and in the finer sculpture of the head and body.

#### PONERA NITIDULA Emery.

Honduras: Ceiba, Progresso, Lombardia, Cecilia.

#### BELONOPELTA (BELONOPELTA) DELETRIX, new species.

Worker.—Length 4 mm. (fig. 4).

Head, excluding mandibles, longer than broad, broadest and with sides more convex in front of middle, posterior border feebly concave. Mandibles, when closed, crossing at middle, long, slender, and arcuate, the inner border at basal half with four strong, elongate teeth, the basal of which is the shortest, anterior edentate portion about as long as the dentate part, acute at tips. Clypeus strongly carinate at middle, triangularly projecting in front and terminating in a blunt spine. Antennal scapes almost attaining occipital corners, thickened at anterior half and with a distinctly concave outline on inner surface before the tip; funiculus stout, gradually thickened toward apex, first joint twice as long as broad, second a little longer than broad, joints 3–10 transverse, terminal joint conical, as long as the two preceding

joints together. Eyes small and flat, situated at anterior sixth of sides of head. Thorax long, slender, and nearly straight in profile. Pronotum longer than broad and widest behind middle, sides convex. Mesonotum half as long as pronotum and broader than long. Base of epinotum flat, more than twice as long as broad and much longer than the declivity, from which it is separated by an obtuse angle; surface of declivity flat, sides obtusely margined. Petiole from above subcampanulate, sides little convex, posterior border broadly concave; in profile higher than long, a little higher behind than in front, not narrowed above, the broadly convex anterior surface rounding into the similarly convex dorsum; posterior surface shallowly concave, roundly margined at sides.

Body and appendages finely and very densely punctate and subopaque, the head in addition with coarser, separate and distinct punc-



FIG. 4.—BELONOPELTA (BELONOPELTA) DE-LETRIX, NEW SPE-CIES. HEAD OF WORKER,

tures. Thorax with very sparse similar punctures. Clypeus with four coarse hairs at anterior margin, mandibles with sparse hairs, head, body and appendages with exceedingly fine pruinose pubescence.

Black, antennae, mandibles and legs reddish brown.

Type locality.—Honduras: Choloma. Cotypes.—Cat. No. 24438, U.S.N.M.

Described from two workers found beneath a log. This species differs from B. attenuata Mayr in its shorter and broader head, the clypeus more projecting and narrowly rounded in front, the more slender and arcuate mandibles with much

longer tips, the longer antennal scapes, smaller size and in having on the head coarser, separated punctures in addition to the dense and subtile punctation.

Both of these species differ markedly in the structure of the head from *curvata* Mayr, *pergandei* Forel, and *jeckylli* Mann and the latter three form a distinct group, of subgeneric value, which may be separated from typical *Belonopelta* as follows:

Head in profile elongate and narrowed in front. Frontal lobes small, not
elevated, nearly parallel to front of head. Mand.bles with several strong
teeth, graduating in size. Sculpture fine\_\_\_\_\_\_Belonopelta Mayr.
 Head in profile short and thick, subquadrate. Frontal lobes larger, elevated
and vertical to front of head. Mandibles coarser, with one very large and
one or more small teeth. Sculpture coarse\_\_\_\_Simopelta, new subgenus.

BELONOPELTA (SIMOPELTA), new subgenus.

Genotype.—Belonopelta (Simopelta) jeckylli (Mann). For characters see the above key.

## LEPTOGENYS (LEPTOGENYS) GAGATES, new species.

Worker.—Length 4-4.5 mm. (fig. 5).

Head subquadrate, a little longer than broad, sides and occipital border nearly straight, occipital corners rounded. Mandibles slightly enlarged toward tips; apical border short and feebly concave. Clypeus sharply carinate at middle, median portion narrowly and weakly triangular, acute at tip, anterior border with broad, triangular teeth on either side of the median projection and closer to it than to the lateral border of head. Eyes slightly shorter than their distance to anterior border of head, composed of more than 30 facets. Antennal scapes surpassing occipital corners by less than one-third their length; first, second, and third funcular joints subequal in length and a little more than two times as long as

broad, remaining joints, except the terminal, slightly longer than broad, terminal joint shorter than the two preceding together. Pro- and mesonotum together much shorter than the epinotum; pronotum little longer than broad; mesonotum strongly transverse, more than two times as broad as long and a little less than one-third as long as pronotum; epinotal base two times as long and rounding into the declivity, which is flat and dentate at lower third of sides. Petiolar node in profile a little higher than long, nearly as broad above as beneath, with the vertical an-



FIG. 5.— LEPTOGENYS (LEPTOGENYS) GAGATES, NEW SPECIES. HEAD OF WORKER.

terior face rounding into the nearly straight dorsum, posterior face flat, rounding into the dorsum; from above a little longer than broad, broadest behind and slightly narrowing anteriorly.

Shining; sparsely, regularly and shallowly, though distinctly, punctate and pilose throughout.

Black; appendages reddish brown, the femora nearly black.

Type locality.—Honduras: San Juan Pueblo.

Cotypes.—Cat. No. 24439, U.S.N.M.

Described from four workers.

Near L. venatrix Forel, from which it differs in the shorter proand mesonotum (in venatrix the two together are as long as the metanotum) and in the shape of the petiole which in venatrix is nearly squamiform.

## LEPTOGENYS (LEPTOGENYS) DONISTHORPEI, new species.

Worker.—Length 6.5 mm. (fig. 6).

Head a little longer than broad, slightly narrowed behind, sides and occipital border nearly straight, occipital corners broadly rounded. Mandibles of nearly equal width throughout; seen from the front, strongly bent at base, then nearly straight, apical border short and very feebly arcuate. Clypeus strongly carinate at middle, the median anterior lobe short and broadly rounded. Eyes large, as long as their distance from anterior borders of head. Antennal scapes surpassing occipital corners by less than one-third their length; second funicular joint about one-third longer than the first, third joint two times as long as broad, joints 4-10 gradually decreasing in length, terminal joint nearly as long as the two preceding joints together. Thorax a little narrower than the head, pronotum a little longer than broad and about three times as long as the mesonotum. Mesonotum oval and nearly as long as broad. Epinotum longer than pro- and meso-notum together, in profile nearly straight above, with the base twice as long as the declivity and broadly rounding into it. Petiolar node in profile as high as long, the anterior face vertical and rounding into the dorsal surface, which is convex and separated



FIG. 6.—LEPTOGENYS (LEPTOGENYS) DONISTHORPEI, NEW SPECIES. HEAD OF WORKER,

by an obtuse angle from the flat, vertical posterior face; from above a little longer than broad and gradually increasing in width from front to rear.

Head, thorax and appendages moderately, gaster strongly, shining. Mandibles shining, delicately striolate longitudinally. Clypeus striolate. Head in front with longitudinal striae, which are finest and more dense on cheeks and immediately inward from the eyes and coarser and more irregular medially; vertex and occiput with shallow fove-olate punctation and subreticulate striae.

Pronotum and epinotum finely and densely striate transversely, the pronotum with a median area where the striae are very obscure and with several coarse punctures. Mesonotum with sparse longitudinal striae. Petiolar node with sparse and coarse punctures and subreticulate striae. Gaster regularly punctate. Appendages densely, finely, and shallowly punctate.

Hairs abundant, moderately long and suberect. Legs with short, recumbent hairs in addition to longer suberect ones.

Black; tip of gaster and the appendages brownish red.

Type locality.—Honduras: Lombardia; Cecilia.

Cotypes.—Cat. No. 24440, U.S.N.M.

This species, which is dedicated to the English myrmecologist, H. St. John Donisthorpe, is related to *L. wheeleri* Forel. The latter species differs in its relatively longer head and antennal scapes and in sculpture, the entire body being densely punctate and opaque.

## LEPTOGENYS (LOBOPELTA) HONDURIANA, new species.

Worker.—Length 10 mm. (fig. 7).

Body rather robust. Head a little longer than broad and broader in front than behind, with nearly straight sides, broadly rounded corners and very feebly convex occipital border. Eyes situated in

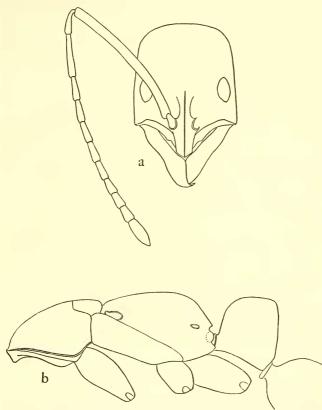


Fig. 7.—Leptogenys (Lobopelta) honduriana, new species. a, Head of worker; b, thorax and petiole.

front of sides of head, large, slightly shorter than their distance to front border of head. Mandibles with distinct basal and apical borders separated by a prominent, rounded angle, apical border distinctly concave at basal third, then very broadly convex and at apical third feebly concave. Clypeus carinate at middle, the anterior por-

tion broad, filling the area between the closed mandibles, apex broadly triangular. Antennal scapes surpassing occipital corners by two-sevenths of their length, second funicular joint nearly as long as the third and fourth together, third joint two and one fourth times as long as broad, remaining joints decreasing in length apically, terminal joint slender, slightly shorter than the two preceding joints together. Pronotum in profile moderately convex; from above longer than broad and less than three times as long as mesonotum. Mesonotum a little longer than broad. Epinotum as long as the pro and mesonotum together, its base in profile rather convex above and broadly rounding into the short, flat declivity. Petiolar node in profile higher than long, slightly higher behind than in front, broadly convex above and rounding into the steep, convex anterior surface and more narrowly into the flat posterior surface; from above, less than twice as long as broad, and evenly narrowed toward the front.

Head, thorax and petiole nearly opaque; densely and coarsely punctate and with striolae, longitudinal on the head and transverse on epinotal base. Mandibles very subtilly striate and with coarse, scattered punctures. Clypeus and front of head irregularly, longitudinal striate. Gaster and legs with regular, moderately coarse, shallow, separated punctures.

Erect hairs long, fine and moderately abundant on head, body and appendages; short, recumbent, silky hairs everywhere, but thickest on gaster.

Color black, mandibles, funiculi, legs and tip of gaster reddish.

 $Type\ locality. \textbf{--} Honduras:\ Lombardia}.$ 

Cotypes.—Cat. No. 24441, U.S.N.M.

Described from a series of eight workers.

In the strong punctation, which on the pronotum is unusually coarse, almost reticulate, the species resembles *L. mexicana* Mayr, which differs in its much smaller size and in the structure of the mandibles, which have the apical border evenly concave instead of biconcave as in *honduriana*.

#### LEPTOGENYS (LOBOPELTA) RUFA, new species.

Worker.—Length, 2.9 mm.

Head one-fifth longer than broad, subquadrate, nearly as broad behind as in front, sides feebly convex, posterior border straight. Mandibles little curved, linear to their apical border, which is very short and feebly concave and separated from the basal portion by an obtuse angle. Clypeus sharply carinate, triangularly produced in front and not occupying the entire area between the closed mandibles. Eyes small, situated at sides of head, at a distance from front of head equal to two times their longitudinal diameter. Antennae stout, arcuate, their scapes surpassing occipital corners by about one-

fourth their length; funicular joints one-third longer than broad, the rest except the terminal as broad or slightly broader than long. Pronotum longer than broad, little convex above. Mesonotum transverse. Epinotum as long as pro and mesonotum together, base in profile slightly convex, declivity flat, obtusely margined at sides on upper half, the margins terminating as stout, blunt spines. Petiolar node in profile higher than long, as broad above as below, with abrupt anterior and posterior faces and broadly convex dorsum; from above, distinctly broader than long and only slightly narrower in front than behind. Gaster and legs rather stout.

Strongly shining. Finely punctate throughout and with mod-

erately abundant fine erect hairs.

Color ferruginous.

Type locality.—Honduras: Ceiba. Cotypes.—Cat. No. 24442, U.S.N.M.

Described from one worker.

The small size, robust form, stout antennae and dentate sides of the epinotal declivity are similar to those characters in *L. pusillus* Emery, which differ from *rufa* in having the head elongate, the petiole longer than broad and in color.

## LEPTOGENYS (LOBOPELTA) CONSANGUINEA Wheeler.

Honduras: San Juan Pueblo.

A single worker taken beneath leaves on the ground agrees closely with cotypes in the Wheeler collection.

# LEPTOGENYS (LOBOPELTA) IMPERATRIX, new species.

Worker.—Length, 10 mm. (fig. 8).

Head elongate, constricted behind to about half its width at clypeus, sides little convex. Eyes large and convex, nearly as long as their distance from the anterior border of head. Mandibles rather broad, the basal and apical borders separated by a rounded angle; apical border evenly concave. Clypeus carinate at middle, the anterior median portion filling the space between the closed mandibles, sides nearly straight, anterior border subtruncate. Antennae very long; scapes surpassing occipital corners by about half their length; second funicular joint much longer than the third, third joint nearly five times as long as broad, remaining joints gradually decreasing in length, the penultimate two and a half times as long as broad and the terminal shorter than the two preceding joints together. Thorax at broadest point a little narrower than the head, pronotum longer than broad, mesonotum less than a third as long as pronotum. Epinotum distinctly longer than pro and mesonotum together, in profile the nearly straight base broadly rounds into the short declivity. Petiolar node strongly compressed, in profile longer than high, more than twice as high behind as in front, the anterior and porterior face declivous and nearly flat; from above two and a half times as long as broad, slightly constricted behind and very strongly so in front. Gaster and legs long and slender.

Very feebly shining. Mandibles more shining, coarsely, though shallowly, and sparsely punctate. Clypeus with irregular, longitudinal striae, the head and body cribrately punctate, the epinotum rugosely and densely punctate and in addition with transverse

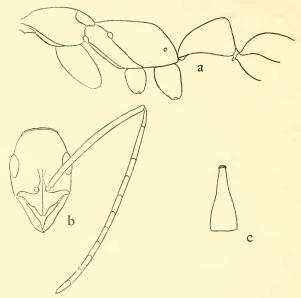


Fig. 8.—Leptogenys (Lobopelta) imperatrix, new species. Worker. a, Thorax and petiole; b, head; c, petiole from above.

striolae, especially noticeable on the declivous portion. Appendages rather densely, shallowly punctate and more shining than the rest.

Head and body with exceedingly sparse, long, erect hairs and short semirecumbent hairs which are moderately abundant on head and thorax and more dense on the gaster. Appendages with scattered erect hairs and abundant, shorter semirecumbent ones.

Color black, with a purple reflection, which is especially rich and deep on the sides of the compressed, smooth, anterior part of the petiolar node; mandibles, funicules, trochanters, tips of femora and tibiae, the tarsi and apex of gaster reddish brown.

Female.-Length 10 mm.

Differing from the worker in having the petiolar node much shorter, in profile a little higher than long and more convex above, and in the enlarged gaster.

Type locality.—Honduras: Lombardia, San Juan Pueblo.

Cotypes.—Cat. No. 24443, U.S.N.M.

Described from a series of workers and one female taken in rotten wood and beneath logs.

In its elongate slender form, constricted head and the large size of the eyes *imperatrix* resembles *famelica* Emery from Costa Rica. The latter species, however, has the petiole shorter and much less constricted in front (seen from above), the anterior portion of the clypeus is broader and the mandibles differently shaped, the sculpture is different and the gaster, judging from Emery's description, lacks the rather dense, almost pruinose covering that occurs in *imperatrix*.

## ANOCHETUS (ANOCHETUS) MINANS, new species.

Worker.—Length, including mandibles, 3.5 mm.

Head broad, deeply incised behind, posterior corners narrowly rounded, sides concave posterior to eyes, bluntly angulate outward from eyes and bisinuate in front. Mandibles much shorter than head, anterior two-thirds thickened, inner surface of blades swollen at middle, edentate, terminal teeth stout, rather blunt at tips, the basal thicker and shorter than the last, the second half as long as the apical. Frontal carinae extending to opposite posterior borders of eves, more elevated than in mayri Emery. Eyes small, with 6-7 large facets. Antennal cavities large, bordered outwardly by a thickened carina stronger than in mayri and roundly angulate at anterior third. Antennal scapes not attaining occipital corners; first funicular joints as long as the second and third together, joints 2-7 elongate, but a little less than twice as long as broad, joints 8-10 twice as long as broad, terminal joint slender, acute, slightly shorter than the three preceding joints together. Pronotum, excluding frontal narrowed portion, as long as broad, widest at posterior half. Meso and epinotum as in mayri but the epinotal spines are coarser and more rounded at tips. Petiolar node in profile a little thicker than in mayri and above more shallowy concave, with the lateral points shorter and less acute.

Moderately shining. Mandibles finely punctate and sparsely pilose. Head in front densely striated longitudinally, at sides obliquely striate, punctate behind. Pronotum at sides with longitudinal striae and punctures, disk finely punctate. Epinotum rugulose-punctate. Petiolar node superficially striate at base. Gaster finely and regularly punctate.

Head, body, and appendages with rather sparse, recumbent pile. Erect, coarser hairs scattered on head and thorax, more abundant on gaster.

Light brownish yellow, apical half of gaster dark brown, mandibles brownish red.

Type locality.—Honduras: Lombardia.

Type.—Cat. No. 24444, U.S.N.M.

This species is described from a single worker close to A. mayri Emery, but differs in its much smaller eye, feeble sculpture and in color, in addition to the characters mentioned in the above description which separate it also, except in color, from mayri, var. neglectus Emery from Brazil.

#### ODONTOMACHUS CHELIFER (Latreille).

Honduras: Choloma, Progresso.

One colony found in débris at the foot of a tree in dense forest.

ODONTOMACHUS HAEMATODA (Linnaeus).

Honduras: Choloma.

ODONTOMACHUS HAEMATODA (Linnaeus), subspecies LATICEPS Roger.

Honduras: Progresso.

ODONTOMACHUS HAEMATODA (Linnaeus), subspecies DULCIS, new subspecies.

Worker.—Length (including mandibles) 8 mm.

Differing from typical haematoda in the following characters:

The size is smaller, the tegument nearly opaque, with the striation of the head and thorax proportionately coarser; gastric segments 1-3 are densely striato punctate and subopaque; the petiole, seen from the front, is distinctly broader and more narrowly rounded at sides; the color is dark brown, with the petiole and legs yellowish and the mandibles and antennal scapes reddish.

Type locality.—Honduras: Progresso.

This is a very distinct subspecies, resembling subspecies *laticeps* but is much smaller, differently colored and with the petiole broader and more convex at sides (seen from the front).

ODONTOMACHUS HAEMATODA (Linnaeus), subspecies STRIATIVENTRIS Emery.

Honduras: San Juan Pueblo, Choloma.

Subfamily Dorylinae.

#### CHELIOMYRMEX MOROSUS (F. Smith).

Honduras: Cebia.

Two intermediate workers were taken from a small colony uncovered by turning a stone. The others disappeared in the ground and could not be again located. In habitus, as well as in the locality where it is found, this species is similar to *Eciton coecum* and liable to be mistaken for it in the field and neglected by the collector.

ECITON (ECITON) BURCHELLI (Westwood), variety INFUMATUM Wheeler.

Honduras: Carmelina, Lombardia, San Juan Pueblo, Choloma.

A common species, frequently seen crossing paths and sometimes raiding dwelling and storehouses.

## ECITON (ECITON) HAMATUM (Fabricius).

Honduras: San Juan Pueblo.

Less common than the preceding species.

# ECITON (LABIDUS) COECUM (Latreille).

Honduras: Carmelina, San Juan Pueblo, San Pedro Sula. Frequently found in the banana fields beneath fallen stalks.

## ECITON (LABIDUS) PRAEDATOR F. Smith.

Honduras: Lombardia.

One large file in the woods was accompanied by several species of conopid flies of the genus *Stylogaster* which followed them evidently in order to oviposit on the worker ants.

## ECITON (ACAMATUS) IMPUDENS, new species.

Worker.—Length 3.25-6.50 mm. (fig. 9).

Head longer than broad and a little broader in front than behind, sides little convex, posterior corners narrowly rounded, border feebly concave. Frontal carinae nearly straight, in profile slightly elevated and rounded. Mandibles at basal two-thirds with a series of five

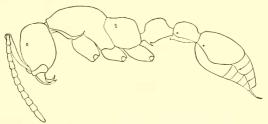


Fig. 9.—Eciton (Acamatus) impudens, new species. Worker.

irregular blunt teeth. Anterior margin of clypeus nearly straight. Antennal scapes extending nearly four-fifths the distance to occipital corners, moderately stout; second funicular joint as long as the third and longer than the first, all the joints longer than broad, thickest apically, terminal joint shorter than the two preceding together. Eye very distinct, convex. Pro-mesonotum about three times as long as broad, evenly convex above. Base of epinotum nearly flat, broadly rounding into the declivity. Petiole as broad in front as behind, twice as long as broad, in profile slightly longer

than broad, feebly convex above, armed anteroventrally with an acuminate spine, which curves backward. Postpetiole a little longer

than broad, moderately convex above.

Head with sparse, fine punctures, strongly shining. Mandibles coarsely striate. Thorax and epinotum granulosely punctate and subopaque; sides of pronotum obscurely striolate. Petiole and postpetiole similarly but very feebly sculptured. Gaster and legs and scapes shining; funiculus subopaque.

Very fine and silky, long, erect yellow hairs scattered on head,

body, and appendages.

Brownish yellow, gaster lighter than the rest.

Type locality.—Honduras: Progresso. Cotypes.—Cat. No. 24446, U.S.N.M.

Described from workers of an army that swarmed upon me while I was sitting on the ground in the forest examining a Pheidole nest. The sting is temporarily painful, but the effects of short duration.

E. impudens is near E. alfaroi Emery, described from Costa Rica, which differs in having the thorax flatter, the head longer and more pointed at the occipital corners, in lacking the distinct eyes, in the widely separated, coarse punctation of the pro-mesonotum, the more elongate and coarsely sculptured epinotal base and in the shorter and triangular anteroventral spine on the petiole.

The distinct eyes, the sharp anteroventral petiolar spine, the strongly shining head and the bright color of *impudens* make it an

easily recognizable species.

Subfamily Pseudomyrminae. Pseudomyrma Gracilis (Fabricius).

Honduras: San Pedro Sula.

PSEUDOMYRMA GRACILIS (Fabricius), variety MEXICANA Forel.

Honduras: Tela.

PSEUDOMYRMA CAROLI Forel.

Honduras: San Pedro Sula. In Bull's Horn Acacias.

PSEUDOMYRMA DISTINCTA F. Smith, variety PULCHELLA Forel.

Honduras: Tela.

One worker of this beautiful little species was found on a leaf.

Subfamily Myrmecinae.

STENAMMA DIVERSUM, new species.

Worker.-Length, 2.25 mm.

Head a little longer than broad and slightly narrowed in front, sides in front nearly straight; occipital corners very broadly rounded; occipital border shallowly concave. Mandibles thick, their blades with three strong teeth on apical half and three short, blunt teeth on

posterior half. Clypeus nearly flat between frontal lobes, short and very moderately convex in front, indistinctly bicarinate at middle, anterior border broadly rounded. Frontal lobes small, but prominently elevated; frontal carinae acute, slightly divergent, extending beyond opposite posterior borders of eyes. Antennal scapes barely surpassing occipital corners; first funicular joint nearly as long as the following three joints together; joints 2-8 strongly transverse; last four joints longer than broad and forming a rather slender club, terminal joint shorter than joints 9-10 together. Eyes situated at sides of head, well in front of middle, convex, much shorter than their distance from anterior border of head. Thorax robust, though narrower than head. Pronotum in profile convex, inferior corners subangulate: from above, a little longer than broad with moderately convex sides and rounded humeri. Mesoepinotal impression strong. Epinotal base straight in profile, about as long as the declivity, with a pair of triangular spines which are longer than their distance apart at base, divergent and directed upward and backward. Petiole elongate, the peduncle much longer than the node, which in profile is higher than long and rounded above, and from above strongly transverse and narrowly rounded at sides. Postpetiole rounded, as broad as, but distinctly lower than, the petiole. Gaster very broadly oval. Legs rather stout.

Shining. Mandibles coarsely and shallowly punctate and striate. Cheeks coarsely and irregularly striate; remainder of head and the gaster smooth. Thorax and epinotal base strongly, reticulately costate. Petiolar peduncle superficially punctate, node smooth. Postpetiole smooth above, at sides with sparse and coarse punctures. Legs shining.

Fine very long and erect yellow hairs abundant on head and body,

shorter on appendages.

Jet black; appendages brownish red, with the femora and tibiae strongly infuscated except at bases and tips.

Type locality.—Honduras: Lombardia. Cotypes.—Cat. No. 24447, U.S.N.M.

Described from two workers collected beneath a stone.

This species strikingly resembles some of the species of *Pristomyrmex* in its sculpture, it is like a small *Rogeria* in habitus and in having the inferior prothoracic corners angulate, but because of the 4-jointed antennal club and the structures of the head I have placed it in *Stenamma*, with doubt.

#### STENAMMA FELIXI, new species.

Worker.-Length 3.75 mm. (fig. 10).

Head a little longer than broad and as broad in front as behind, sides feebly convex, occipital corners rounded, border straight. Man-

dibles thick, their blades with four short and broad triangular teeth. Clypeus but little convex anteriorly, its border narrowly and very feebly concave at middle. Frontal lobes little elevated, narrow; the carinae short, bordering the antennal fossae behind. Antennae short and stout, scapes attaining occipital corners; first funicular joint nearly as long as the three following joints; joints 2-6 transverse, joint seven about as long as broad, joints 8-11 longer than broad, together forming a club much longer than the remainder of funiculus; with the terminal joint a little shorter than the two preceding joints together. Eyes moderate in size, not very convex, situated at sides of head well in front of middle. Thorax robust. Promesonotal

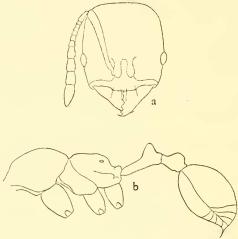


Fig. 10.—Stenamma felixi, new species. Worker. a, Head;
b. Thorax and Abdomen.

suture discernible but feeble and not interrupting the sculpture. Promesonotum evenly but weakly convex above, humeri rounded. Mesoepinotal suture deeply, but not broadly impressed. Epinotum entirely unarmed, the base more than twice as long as broad and longer than the flat, sloping declivity; border of declivity margined at base by thin, ear-shaped projections. Petiole with a long, slender peduncle, node subconical, narrowly rounded at top. Postpetiole elongate, shorter, and a little broader than the petiole, longer than broad, broadest behind middle; in profile, rather strongly convex above. Legs rather stout.

Gaster shining, the rest slightly shining. Mandibles shining, striate at base and sparsely punctate elsewhere. Head densely punctate and with striae which are longitudinal and straight at middle of

ART. 13.

front and tortuous and reticulate on sides and occiput. Thorax coarsely reticulately striate, the striae more transverse on the mesothorax. Base and declivity of epinotum transversely striate. Petiole finely and superficially punctate. Gaster with sparse, fine punctures. Antennal scapes rugulose. Legs finely punctate.

Fine, erect rather stiff hairs moderately abundant on head and body. Antennae and legs with sparse pubescence, the legs with a

few longer semiappressed hairs.

Black; appendages dark brown.

Type locality.—Honduras: San Juan Pueblo. (Several specimens on orchids from Jalapa. Mexico, taken in quarantine at Washington are apparently identical with the cotypes.)

Cotypes.—Cat. No. 24448, U.S.N.M.

Described from six workers.

This species, which is dedicated to Don Felix Vacarro, of Ceiba and New Orleans, and the preceding species are aberrant in the structure of the antennae, but otherwise have the characters of the genus Stenamma.

#### APHAENOGASTER (DEROMYRMA) HONDURIANA, new species.

Worker.—Length, 3.75-4 mm. (fig. 11).

Head elongate, broadest in front, sides little convex; occiput narrowed, with the border reflexed. Mandibles large, pointed at tips, the blades with five short, broadly triangular teeth, the apical of which are larger than the others. Clypeus moderately convex, broadly rounded at anterior border. Frontal lobes narrow; carinae feeble, extending to opposite middle of eyes. Antennae slender, the scapes extending half their length beyond the occipital corners. funicular joints 2-7 about twice as long as broad; joints 8-11, much longer and a little thicker, forming an elongate club, which is somewhat longer than the remainder of the funiculus. Eyes large and convex, situated a little in front of the middle of head. Thorax slender. Pro-mesonotum in profile evenly arcuate above, except the posterior fifth, which is rather flat and sloping toward the strong mesoepinotal impression. Epinotum in profile with the base flat, nearly two times as long as the declivity and separated from it by an obtuse angle, feebly dentate at the corners. Peduncle of petiole as long as the node, which is highest in front, flat and sloping dorsally and short and sloping behind. Postpetiole slightly shorter than the petiole, evenly convex in profile; from above more than two times as broad as the petiole, narrowed in front, broadest behind middle. Gaster elongate oval. Legs long, the femora slightly thickened in front of middle.

Body and legs moderately shining. Mandibles moderately shining,

coarsely striate. Head with dense, cribrate punctures and a few wavy striae, which are longitudinal on the front and oblique on the cheeks. Pronotum with extremely shallow punctures. Mesonotum punctured more coarsely than the pronotum and its posterior portion rugulose. Base of epinotum irregularly, transversely striate. Petiole, postpetiole, and gaster very shallowly punctate, similar to the pronotum. Legs finely and densely punctate.

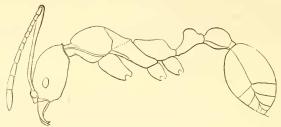


FIG. 11.—APHAENOGASTER (DEROMYRMA) HONDURIANA, NEW SPECIES.
WORKER.

Head and body with stiff and blunt erect black hairs. Flexor margins of femora with a row of similar hairs. Antennae and legs sparsely pubescent.

Color dark brown to black. Antennae and legs brown.

Female.—(deälated). Length 4 mm. Mesothorax slightly convex in profile. Scutellum one-fourth broader than long, suboval. Epinotal spines coarser than in worker.

Mesothorax rugosely punctate and with short, irregular carinae. Sculpture, pilosity, and color as in worker.

Type locality.—Honduras: Lombardia, San Juan Pueblo.

Cotypes.—Cat. No. 24449, U.S.N.M.

Described from one female and many workers taken from a number of colonies found in rotten wood, where it resembled in nesting habits and habitus Megalomyrmex silvestrii Wheeler.

A. honduriana is much smaller than the other Central American Aphaenogasters and is characterized by the short neck, the elongate antennae with four-jointed club, by the sculpture and color.

There is, in the series before me, some variation in sculpture and in the degree of the angle between the base and declivity of the epinotum, which in some workers is very finely dentate at the sides and in the others roundly angulate.

## APHAENOGASTER (DEROMYRMA) PHALANGIUM Emery.

Honduras: San Pedro Sula.

Several colonies found in canons near the city were beneath stones near streams. This species is "mimicked" by a spider and an Alydid bug, both of which I found only in the same locality as the ants.

## PHEIDOLE (ELASMOPHEIDOLE) HONDURENSIS, new species.

Soldier.—Length 3.10 mm. (fig. 12).

Head, excluding mandibles, one and one-third times as long as broad, slightly broadest in front; sides nearly straight, occipital corners broadly rounded, occipital border rather strongly concave; vertex with a narrow and deep median sinus. Mandibles short and thick, blades concave, armed with a pair of coarse, blunt teeth at apex, and several very small and blunt teeth at middle. Clypeus elongate, triangular, circularly impressed at middle and behind, nearly straight at anterior border. Frontal carinae short, not ex-

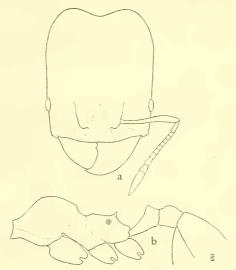


FIG. 12. — PHEIDOLE (ELASMOPHEIDOLE) HONDURENSIS, NEW SPECIES. SOLDIER. a, HEAD; b, THORAX AND PETIOLE.

tending posterior to antennal fossae, their lobes thin and elevated; from the side, projecting as triangular spines. Antennae short and rather slender; scapes somewhat flattened at base, extending a little less than half the distance to occipital; first funicular joint distinctly longer than the second and third joints together, third joint about as broad as long, joints 4–8 gradually increasing in length, those apically distinctly longer than broad; club 3-jointed, about as long as remainder of funuculus, joints longer than broad, with the terminal as long as the other two together. Eyes rather large, feebly convex, situated at anterior third of sides of head. Thorax about half as

broad as head, strongly convex in profile, sides and humeri rounded. Mesoepinotal impression strong. Base and declivity of epinotum rounding into each other, both surfaces flat; spines erect, elongate-triangular, rather bluntly pointed, shorter than their distance apart at base. Petiolar node cuneiform, much shorter than the peduncle, upper border concave at middle. Postpetiole broader than long and nearly twice as broad as petiole; sides subangulate in front of middle. Gaster elongate.

Shining. Mandibles sparsely punctuate. Head with rather fine, elongate, separated longitudinal striae, that extend two-thirds the distance from anterior border to occiput (in antennal fossae finer and more approximate); posterior portion of head and the thorax and abdomen with regular, rather sparse punctures.

Fine, moderately long, erect, yellowish pilosity abundant on head, body and appendages. Sparser and semirecumbent on mandibles.

Dark reddish brown, anterior portion of head and the clypeus red, legs brownish yellow.

Worker.-Length 1.5 mm.

Head a little longer than broad and about as broad in front as behind, sides and posterior border nearly straight, occipital angles broadly rounded. Mandibles with eight unequal, separated triangular teeth. Clypeus convex behind, flat in front, broadly rounded at anterior border. Antennal scapes surpassing occipital borders by one-seventh of their length; funicular joints 2–8, a little longer than broad; basal joint of club distinctly longer than the second, terminal joint about as long as the other two together. Thorax a little more than half as broad as head, evenly convex in profile, with rounded sides and humeri. Base and declivity of epinotum subequal, flat, rounding into each other; spines very small. Petiole and postpetiole as in soldier, but the dorsal surface of the petiole is not excised.

Shining: Antennal fossae with concentric separated striae. Mandibles, head and body sparsely, distinctly puncuate.

Pilosity and color as in soldier.

Type locality.-Honduras: San Juan Pueblo.

Cotypes.—Cat. No. 24450, U.S.N.M.

Described from eight soldiers and three workers.

In the shape of its head, *Ph. hondurensis* approaches *Ph. absurda* Forel. The latter species has the head proportionately longer, the antennae are distinctly shorter and the eyes much smaller, the structure of the petiole and postpetiole and the sculpture is quite different. *Ph. bicornis* Forel, which also has the frontal lobes projecting angulately forward, has a shorter head than *hondurensis*, the clypeus is distinctly concave in front and the head and thorax are subopaque and reticulately rugose.

#### PHEIDOLE WALKERI, new species.

Soldier.-Length 3.90 mm. (fig. 13).

Head, excluding mandibles, one-fifth longer than broad, slightly narrowed in front, sides nearly straight, occipital corners rounded, occipital border narrowly and rather deeply concave at middle; vertex with a deep median sinus. Blades of mandibles with a pair of very blunt teeth at tips. Clypeus obtusely carinate at middle of basal half, anterior surface rather flat, border very shallowly concave. Frontal lobes short and thick; seen from the side, projecting and broadly triangular; their carinae very short. Antennal scapes

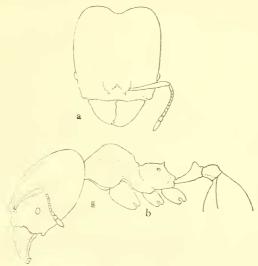


Fig. 13.—Pheidole Walkeri, new species. Soldier. a, Head; b, Head, thorax, and petiole.

slender, extending a little more than half the distance to occipital corners; funicular joints 2–8 a little longer than broad. Eyes small, little convex, situated at anterior third of sides of head. Thorax strongly convex in profile, humeri rounded, sides at middle subgibbous. Mesepinotal impression profound. Base of epinotum distinctly longer than the declivity and separated from it by an angle; surface with a shallowly, longitudinal impression at middle. Spines erect, elongate triangular, shorter than their distance apart at base. Petiolar node in profile blunty conical; dorsal border concave at middle. Postpetiole twice as broad as long, sides at middle somewhat projecting and narrowly rounded. Legs rather stout.

Shining. Mandibles finely rugulose-striolate and punctate, more densely at base and on outer half, with sparse, rather coarse punctures. Front and vertex rugulose and with fine striae, which are reticulate on the cheeks, longitudinal at middle of front and curving on vertex and occiput and more approximate. Thorax transversely striate. Base of epinotum obliquely striate, feebly at middle, more strongly at sides. Petiolar node transversely striate and posterior surface of postpetiole indistinctly striate. Gaster and legs very finely punctate.

Erect hairs rather coarse, long, moderately abundant on head and thorax, abundant on petiole and gaster, shorter and finer on appendages.

Color black; legs brown.

Worker.—Length 2 mm.

Head slightly longer than broad, a little narrowed in front, sides feebly convex, occipital corners very broadly rounded, posterior border straight. Mandibles elongate, their blades with 7-8 unequal triangular teeth. Clypeus rounded at anterior border. Frontal carinae subparallel, extending to opposite anterior border of eyes. Antennal scapes surpassing occipital corners by about one-fifth their length; funicular joints 2-8 slightly longer than broad; club slender, the first two joints subequal in length and together about as long as the terminal. Thorax in profile moderately convex, sides and humeri rounded. Base of epinotum slightly convex, much longer than the declivity. Epinotal spines triangular, acute, shorter than their distance apart at base, erect. Petiolar node thickly triangular in profile; its posterior border indistinctly excised. Postpetiole less than twice as broad as petiole, longer than broad, sides broadly rounded. Legs rather stout.

Shining. Antennal fossae and cheeks striate and head with a few feeble striae in front. Thorax with sparse and very indistinct transverse striae. Base of epinotum rugulose.

Pilosity and color as in soldier.

Type locality.—Honduras: San Juan Pueblo, Lombardia.

Cotypes.—Cat. No. 24451, U.S.N.M.

Described from numerous soldiers and workers found nesting in rotten wood.

Named in honor of Frederick Walker, soldier of fortune.

#### PHEIDOLE FIMBRIATA (Roger).

Honduras: Lombardia, Progresso, San Juan Pueblo.

PHEIDOLE PUGNAX Dalla Terre.

Honduras: San Juan Pueblo.

## PHEIDOLE GOULDI Forel.

Honduras: Cecilia, Lombardia, Monte Cristo, San Juan Pueblo. This is the common *Pheidole* of the plantations. It nests in dead wood.

WOOD.

PHEIDOLE ANASTASH Emery, variety CELLARUM Forel.

Honduras: Ceiba.

# CREMATOGASTER BREVISPINOSA Mayr, variety.

Honduras: Ceiba, Choloma, San Pedro Sula.

Found at Ceiba in great numbers on trees in a citrus grove, where it makes shelters of easters, though no large nests, and attends the various scale and white-fly parasites of the trees.

## CREMATOGASTER ACUTA (Fabricius).

Honduras: Ceiba.

MONOMORIUM CARBONARIUM (Smith), variety EBENINUM Forel.

Honduras: Ceiba.

MEGALOMYRMEX (WHEELERIMYRMEX), new subgenus.

Differing from typical Megalomyrmex in the form of the proand mesonotum, which are not separated by a suture and together form a hemispherical mass and in the structure of the mandibles, which are flat and with only two teeth.

Genotype. - Megalomyrmex (Wheelerimyrmex) silvestrii

(Wheeler).

## MEGALOMYRMEX (WHEELERIMYRMEX) SILVESTRII (Wheeler).

A good series of workers were taken at Ceiba and San Juan Pueblo, nesting in the ground or in rotten logs. It is a timid species and very active when disturbed. My specimens agree closely with cotypes from Cordoba, Mexico.

#### TRANOPELTA COLUMBICA Forel, variety.

Honduras: Lombardia, Tela.

Numerous workers were found under stones in the woods. Emery kindly compared some of my specimens with a cotype of *columbica* in his collection, and writes that the Honduras individuals are paler in color than the typical form.

#### SOLENOPSIS AZTECA Forel.

Honduras: San Juan Pueblo.

One colony was found. The workers run to this species in Emery's key and agree closely with Forel's description, which was based on specimens from St. Vincent.

#### SOLENOPSIS PICEA Emery.

Honduras: San Juan Pueblo, Carmelina.

SOLENOPSIS GEMINATA (Fabricius).

In all localities visited.

#### MACROMISCHA SCANDENS, new species,

Worker.—Length 3.25 mm. (fig. 14).

Head distinctly longer than broad, subquadrate, sides nearly straight, occipital corners broadly rounded, border straight. Mandibles with five stout teeth. Clypeus flat in front and straight at anterior border. Frontal carinae feebly elevated, straight, extending to opposite anterior border of eye. Antennal scapes extending about five-sixths the distance to occipital corners, funicular joints 2–7 transverse; club longer than remainder of funiculus, slender, with the first joint shorter than the second and the terminal

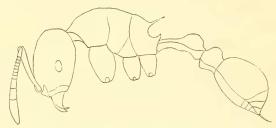


Fig. 14,-Macromischa scandens, new species. Worker.

longer than the other two together. Eyes large, little convex, situated well in front of middle of sides of head. Thorax robust, convex in profile, pronotum with an indistinct, thick margin at sides, anteroventral corners obtusely angulate. Mesopinotal suture distinct, but not interrupting the sculpture. Base of epinotum flat in profile, as long as the declivity, spines straight, moderately stout, longer than their distance apart at base, directed upward and backward, diverging; inferior spines large, longer than broad, rounded apically. Petiole beneath strongly biconvex in profile, anteroventral tooth elongate triangular, directed forward, peduncle slender, about as long as node and gradually rounding into it; node longer than high, evenly convex in profile, from above longer than broad, with sides rounded. Postpetiole rounded, a little broader than long and broader than the petiole. Legs long and rather slender.

Mandibles punctate, shining. Head feebly shining, thorax more shining than the head but much less than the gaster and legs. Head with fine striae, some of them slightly tortuous, longitudinal at middle

and becoming diagonal posteriorly at sides, the surface between and the antennal fossae densely punctate. Thorax with coarse, rugae, longitudinal and more regular on the pronotum, tortuous behind. Peduncle of petiole densely, superficially punctate above, node longitudinally rugose. Postpetiole punctate and with indistinct longitudinal rugae. Gaster with very fine and sparse punctation. Legs fairly punctate.

Yellowish, rather stiff erect hairs on head, thorax and abdomen.

Appendages with short, fine recumbent hairs.

Dark reddish brown, appendages not or scarcely lighter than the body.

Type locality.—Honduras: Lombardia.

Cotypes.—Cat. No. 24452, U.S.N.M.

Described from six workers that were found on the trunk of a tree at the edge of the forest. When disturbed they elevated the body and shoved the gaster forward and beneath it in the usual *Macromischa* manner.

In its large size, coarse sculpture, the short antennal scapes and in the structure of the node scandens is entirely different from the other Central American species. The Tetramorium like habitus is somewhat similar to that of M. affinus Mann from Cuba, but the structure of the node is very unlike in the two species. An aberrant form. M. scandens might possibly be considered a large Leptothorax but has no close relationship with any described species in that genus.

LEPTOTHORAX (GONIOTHORAX) ECHINATINODIS Forel, var. ACULEATINODIS Emery.

Honduras: Ignacio.

One small colony in a twig.

ROGERIA? BELTI, new species.

Worker.-Length 2-2.25 mm.

Head subquadrate, a little longer than broad, sides and posterior border nearly straight. Mandibular blades with six unequal teeth. Clypeus moderately convex, the median portion finely margined, anterior border very feebly concave at middle. Eyes little convex, situated at anterior third of sides of head. Antennal scapes stout, not attaining occipital corners, funicular joints, except the first and the three forming the club, strongly transverse, terminal joint distinctly longer than the two preceding joints. Thorax robust, not very convex above, humeri rounded, inferior angles triangular, not produced. Mesoepinotal suture perceptably impressed, but not interrupting the sculpture. Epinotal base rather flat and sloping, about as long as the declivity; spines straight, acute at tips, as long as their distance apart at base, directed backward and upward and moderately divergent; inferior spines broad and rounded. Petiolar

peduncle shorter than the node, which is higher than long and convex in profile and, from above, a little longer than broad, with moderately rounded sides. Postpetiole in profile slightly shorter than the petiolar node and less convex above; from above nearly circular in shape and a little broader than the node.

Shining, the gaster, postpetiole and legs more than the rest. Mandibles shining and finely punctate. Head at middle with longitudinal and at sides with oblique striae, which are somewhat recticulate; occiput and thorax coarsely reticulate, epinotum more widely so. Petiolar node regulose. Postpetiole and gaster finely and spaysely punctate.

Very fine erect hair aboundant on head and body, similar, but

shorter, on appendages.

Black. Mandibles and appendages reddish brown.

Type locality.—Honduras: Progresso. Cotypes.—Cat. No. 24453, U.S.N.M.

Described from a dozen workers from one colony found beneath bark.

Rogeria tonduzi Forel, the only other known Central American species, has the clypeal margins elevated, the thorax is strongly convex and without trace of mesoepinotal impression, the petiolar node rises very gradually from the peduncle and is less elevated than in belti, and its eyes are situated more nearly at the middle of the sides of head.

# ROGERIA INERMIS, new species.

Worker.—Length, 1.90 mm. (fig. 15).

Head distinctly longer than broad, slightly narrowed in front, sides scarcely convex, posterior corners broadly rounded, border straight.



Fig. 15.—Rogeria inermis, new species.

Mandibles with five triangular teeth. Median portion of clypeus elevated and margined at sides by narrow carinae; anterior border broadly concave. Frontal lobes about twice as long as broad, their

outer blades broadly rounded. Antennal scapes extending four-fifths the distance to occipital corners; first funicular joint longer than the second and third together, joints 2-8 strongly transverse; club with the terminal joint much longer than the other two together. Eyes composed of about twelve facets, situated at sides of head well in front of middle. Thorax robust, without sutures; inferior angles of pronotum dentiform, anterior corners subangulate, dorsum moderately convex. Basal and declivous parts of epinotum not distinct; border of latter surface unevenly margined, the margin behind ele-

vated into low rounded lamellae. Petiole with a slender peduncle shorter than the node and rounding into it above; node in profile as long as broad, evenly convex above; from above one and one-third times as long as broad. Postpetiole broadest behind, scarcely broader than the petiole and a little longer than broad. Gaster broadly oval.

Gaster shining, body and appendages moderately shining. Mandibles finely punctate and, at base, indistinctly striate. Head irregularly striate, the striae longitudinal on front, slightly oblique at sides and becoming reticulate on occiput, the surfaces between striae uneven and finely punctate. Thorax rugosely striate, two striae at base transverse, the remainder irregularly longitudinal on pro and mesonotum and reticulate on epinotum. Petiole punctate and finely rugulose. Postpetiole finely punctate. Gaster with very fine punctures.

Head and body with moderately abundant, long, erect, silky hairs. Antennae and legs with shorter, fine hairs.

Dark brownish red, gaster black, appendages brownish-yellow.

Type locality.—Honduras: Progresso, Lombardia.

Cotypes.—Cat. No. 24454, U.S.N.M.

Described from five workers. The Lombardia specimen is darker in color and the reticulation of the thoracic rugae is more pronounced.

Rogeria inermis is distinct from the other Neotropical species in having the epinotum unarmed. The shape of the head resembles that of certain species of *Tetramorium* and the petiole, broadest behind, is somewhat similar to some species of *Macromischa*.

#### APSYCHOMYRMEX MYOPS Wieeler.

Honduras: San Jaun Peublo, Lombardia.

Occurs in small colonies beneath stones, the colonies resembling those of *Rogeria*.

TETRAMORIUH (TETROGMUS) SIMILLIMUM F. Smith.

Honduras: Ceiba.

WASMANNIA AUROPUNCTATA (Roger).

Honduras: Ceiba, San Juan Pueblo, Cecilia, Lombardia.

CRYPTOCERUS GIBBOSUS F. Smith.

Honduras: Ceiba, San Juan Pueblo.

CRYPTOCERUS MULTISPINUS F. Smith.

Honduras: Ceiba, Lombardia.

CRYPTOCERUS ANGULATUS F. Smith.

Honduras: San Juan Pueblo.

#### CRYPTOCERUS CRISTATUS Emery.

Honduras: Carnelina.

CRYPTOCERUS VARIANS F. Smith.

Honduras: Ceiba.

CRYPTOCERUS MINUTUS (Fabricius).

Honduras: Ceiba, Monte Cristo, Tela.

CRYPTOCERUS MASCULATUS F. Smith.

Honduras: San Juan Pueblo, Choloma.

A colony at Choloma was nesting in Bull's horn Acacia.

# ACANTHOGNATHUS LENTUS, new species.

Worker.—Length (including mandibles) 3.50-4 mm. (fig. 16.)

Head about one and three-eighths times as long as broad and more than twice as broad at occiput as at anterior border; sides in front

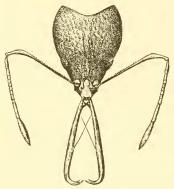


FIG. 16.—ACANTHOGNATHUS LENTUS, NEW SPECIES. HEAD OF WORKER.

of eyes nearly straight, converging, with a small angulate projection at one-third the distance from the anterior margin; sides behind eyes convex; occipital corners narrowly rounded, the border deeply concave. Mandibles as long as head, straight, of subequal width throughout, the apex with three slender teeth the first and third of which are equal and the middle longer; basal inferior spines about one-fifth as long as the mandibles. slightly curved and feebly bidentate at apex. Clypeus narrow behind, extending between

frontal lamallae, in front flatly impressed at middle, with the lateral borders slightly elevated and rounded. Antennal foveae large, extending to opposite anterior margin of eye. Antennae slender, scapes very slender for two-thirds their length, then incrassate and narrowed again at tips, slightly surpassing occipital corners; first funicular joint nearly as long as the four succeeding joints together, second joint longer than the third, joints 3–7 gradually increasing in length, joint 8 distinctly longer than the seventh, penultimate joint two-thirds as long and much more slender than the terminal. Eyes moderately large, little convex in profile, armed with pair of stout

triangular spines at sides a little in front of middle. Mesoepinotal suture deeply impressed. Base of epinotum about equal in length to the declivity, its surface feebly convex above; spines slender, slightly curved upward, longer than their distance apart at base. Petiole with peduncle slender and much longer than the node; node in profile a little longer than broad, rounded above. Postpetiole barely broader than the petiole and a little longer than broad.

Shining throughout, petiole, postpetiole, gaster and appendages more than the head and thorax. Head with large, shallow, foveolate punctures and feebly reticulated between, thorax coarsely reticulated, base of epinotum reticulated more finely than the thorax, with irregular, transverse, rugae apically. Petiolar peduncle densely punctate and subopaque.

Mandibles with several fine long hairs near tips. Head, thorax, petiole, postpetiole and legs with short, semirecumbent stout hairs, which are most abundant on the head. Gaster with sparse, micro-

scopic pubescence.

Color reddish brown, petiole, postpetiole and gaster black, legs lighter, with the tibiae infuscated, especially apically.

Female.—(deälated) Length 4.10 mm.

Very similar to the worker, with the usual sexual differences.

Type locality.—Honduras: Progresso.

Cotypes.—Cat. 24455, U.S.N.M.

Described from several workers and one dealated female. The colony was nesting in rotten wood. The movements in life are slow, like most of the species of *Strumigenys*.

A. lentus differs from A. occilatus Mayr, the only other known species in its darker color, the more distinct sculpture of the head and thorax and in having the occiput rather narrowly excised. In occilatus the latter is more broadly and roundly excavated.

## STRUMIGENYS (STRUMIGENYS) LUDIA, new species.

Worker.—Length, including mandibles, 2.90 mm. (fig. 17).

Head about one-fourth longer than broad, deeply and roundly excavated behind, occipital corners narrowly rounded; sides in front of eyes biconvex, behind eyes feebly convex. Mandibles slightly less than three-fourths as long as head (from occipital corners to anterior border) nearly straight, of subequal width except at base and tip, with three slender apical teeth, the middle of which is one-third as long as the basal and terminal. Clypeus triangular, a little broader than long, shallowly concave at anterior border, the median surface, in front of middle, elevated into a low, rounded tubercle. Supraorbital carinae straight, divergent, two-thirds as long as antennal scapes; scrobes broad and moderately concave. Antennal scapes very slender, extending four-fifths the distance to occipital corners;

first funicular joint as long as the second and third joints together, joints 2-3 longer than broad; penultimate joint two and one-half times as long as the third; terminal joint nearly as long as the remainder of funiculus. Pronotum flat in profile, margined distinctly in front, less distinct at sides; broadest a little in front of middle where the sides are obtusely angulate. Mesonotum submargined at sides. Mesoëpinotal suture shallowly impressed. Base of epinotum narrow, nearly twice as long as the declivity; spines slender, longer than their distance apart at base, moderately divergent, directed backward and upward and slightly curved downward. Petiole in profile gradually rounding into the node, which is little elevated: node from above subquadrate, about as long as broad, with the anterior corners obtusely angulate. Postpetiole broader than long and

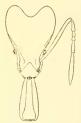


FIG. 17.-STRUMIGENYS DIA, NEW SPECIES. HEAD OF WORKER.

about one and one-half times as broad as the petiole. Legs long and rather slender.

Subopaque, coarsely and granulosely punctate, more finely on gaster; the posterior portion of head, the pronotum and the base of gaster with longitudinal striae, straight on the gaster and irregular on the pronotum and head.

Hairs short and curved on head, thorax and appendages, club-shaped on supraocular border. straight and elongate-claviform on gaster. Spongiferous hairs well developed on posterior (STRUMIGENYS) LU- margins of petiole and postpetiole and ventral surface of the latter.

Brownish vellow.

Type locality.—Honduras: Cecilia. Cotypes.—Cat. No. 24456, U.S.N.M.

Described from a series of workers from a colony that was nesting in a small pocket in a rotten log.

Near elongata Roger but larger, with longer mandibles, less abrupt petiolar node and entirely different sculpture. The antennal scapes are much more slender than in the related imitator Mayr from Brazil which differs also in having the gaster smooth, except for the short basal striae, and shining.

#### STRUMIGENYS ELONGATA Roger.

Honduras: Ceiba, San Juan Pueblo, Cecilia, Progresso, Choloma. Small colonies were found in rotten wood. The workers have the thorax densely punctate, and the pronotum is longitudinally carinate at middle.

#### STRUMIGENYS BIOLLEYI Forel.

Honduras: Lombardia.

One large colony in a rotten log. The workers resemble those of Acanthognathus lentus in general appearance.

#### STRUMIGENYS (STRUMIGENYS) EMERYI, new species.

Worker.—Length, including mandibles. 2.10 mm. (fig. 18).

Head about one-fourth longer than broad, posterior border convexly excised, occipital corners evenly rounded; sides posterior of eyes nearly straight, in front of eyes feebly convex. Mandibles straight, rather thick, more than half as long as head, with two long terminal spines which have a shorter spine between them and one subapical spine, situated near the basal apical and about one-third its length. Clypeus nearly as long as broad, narrowed behind, truncate at anterior border. Frontal carinae straight, divergent, bordering scrobes, three-fourths as long as the head and containing the entire antennal scapes. Antennal scapes extending about three-fourths the distance to occipital corners; funiculus not very slender, first joint longer than the second and third together, second and third joints about as broad as long. Eye slightly convex. Pronotum nearly flat, humeri obtusely angulate. Mesoëpinotal suture rather strongly impressed. Epinotal base flat, longer than the declivity,

spines shorter than their distance apart at base, acute at tips, lamellate beneath, the lamellae continuing as margins to the declivity. Petiolar peduncle slender, as long as the subglobose node which rises abruptly from it. Postpetiole oval. transverse, one-half broader than the petiole.

Legs slender.

Gaster and dorsum of postpetiole strongly shining and smooth except for short costae at base of Fig. 18.—Strumpaster; head, thorax, and appendages moderately shining. Mandibles densely punctate. Head rugosely punctate and with coarse, fine striae, longitudinal on front and becoming reticulate behind. Thorax finely punctate and more shining than head, with a median carina which is strong on the pronotum, weaker on the mesonotum; and irregular, longitudinal carinulae. Epinotal base shallowly punctate. Petiolar node rather coarsely punctate.

Sparse very long and flexnous hairs, mingled with shorter curved hairs on thorax and abdomen and elongate, curved, clavate hairs on head and antennal scapes. Spongiferous masses on posterior borders and ventral surfaces of nodes.

Reddish brown; gaster darker than the rest.

Female.—(deälated). Length 2.50 mm.

Ocelli small. Mandibles shorter than in worker. Epinotal spines thicker.

Sculpture similar to that of worker, but rather coarser; median carina of pronotum interrupted by impression between pronotum and scutellum but extending length of scutellum.

Type-locality.—Honduras: Ceiba, San Juan Pueblo. Cotypes.—Cat. No. 24457, U.S.N.M.

Several small colonies were found in rotten logs.

This species approaches S. fusca Emery but is much smaller, the head is more narrowed in front and the occipital incision narrower; the clypeus is much longer. The straight mandibles are longer than in louisianiae Roger and its varieties, from which emeryi differs also in lacking the very short, squamiform hairs on the head.

# STRUMIGENYS CORDOVENSIS Mayr.

Honduras: Ceiba.

One large colony of this beautiful species was found nesting in rotten wood.

### STRUMIGENYS BREVICORNIS, new species.

Worker.-Length 1.50 mm.

Head elongate, narrowly concave at middle of posterior border; sides convex posterior to eyes, very slightly convex and subparallel in front of eyes. Mandibles less than half as long as head, rather slender and tapering, outer border shallowly concave in front of middle, inner border edentate basally, a small though distinct tooth in front of middle and several very fine, separated denticulae between this and the tips. Clypeus slightly broader than long, rounded at anterior border. Antennal scapes less than half as long as head, the upper border very shallowly concave, the inner border roundly expanded at middle; first funicular joint as long as the second and third together, third joint a little shorter than the first; terminal joint slightly longer than the remainder of funiculus. Pronotum nearly flat, margined in front, humeri rounded. Epinotal spines triangular, their width at base nearly as great as their length and their length a little shorter than their distance apart at base. Petiolar node from above broader than long, very slightly broader behind than in front, with feebly convex sides and nearly straight anterior border; in profile a little shorter than the pedicel, rounded above and sloping in front. Postpetiole about twice as broad as petiole, excised at middle of posterior half.

Head, thorax, petiole and postpetiole coarsely cribrate-punctate and nearly opaque. Gaster shining and smooth except for short basal striae. Erect hairs elongate-clavate, sparse on head, thorax and abdomen; curved, flattened hairs on clypeal margin, border of antennal scapes and tibiae and tarsi. Ventral and posterior margins of postpetiole with moderately well-developed spongiform hairs.

Pale reddish brown, gaster, except base, dark brown to black.

Female (deälated). Length 1.90 mm.

Epinotal spines broader, petiole node less elevated and sloping more gradually in front and color darker than in the worker.

Type locality.—Honduras: Ceiba. Cotypes.—Cat. No. 24458, U.S.N.M.

Described from one female and five workers.

This species is related to S. crassicornis Mayr from Southern Brazil, which differs in its longer epinotal spines. longitudinally ridged pronotum, more angulately expanded antennal scapes and in lacking (at least in the specimen before Mayr) the spongiform brush on the postpetiole.

# STRUMIGENYS ALBERTI Forel.

Honduras: San Juan Pueblo, Cecilia.

The first gastric segment of the workers in my series is more strongly infuscated than in workers from Hayti and Cuba and one from Costa Rica (collection Forel) but the specimens seem otherwise the same.

#### RHOPALOTHRIX (RHOPALOTHRIX) AMOENA, new species.

Worker.—Length 1.75 mm.

Head, excluding the mandibles, a little longer than broad, shallowly and broadly concave behind, posterior portions of sides convex instead of straightly truncate as usual in the other species, anterior portion of sides nearly straight and subparallel. Clypeus flat, distinctly broader than long, anterior border nearly straight. Mandibles slender, the outer border feebly concave at middle, tips slender, blades with eight triangular teeth. Antennae 7-jointed, scapes at base about one-fourth as broad as long, the basal corner rounded, first funicular joint slightly broader than long and much broader than the second. joints 2-5 transverse, the third and fourth more strongly than the second and fifth; terminal joint nearly as long as the remainder of funicular. Eves convex. Pro-mesothorax a little longer than broad, widest and rather narrowly rounded at middle, surface feebly convex. Mesoepinotal suture distinct. Base of epinotum as long as the declivity, slightly convex in front, flat behind. Epinotal spines strongly compressed, triangular, very feebly curved at tips, their bases extending as lamellate margins to the declivity. Petiolar peduncle about as long as wide, which is flat above, barely broader than long, with sides and corners rounded and anterior border straight. Postpetiole twice as broad as long and more than twice as broad as petiole, its surface narrowly excised in back of middle.

Nearly opaque. Head and body coarsely cribately punctate, the head somewhat rugulose, especially in front. Mandibles and legs

densely punctate and not more shining than the rest.

Head and body (except epinotum) and appendages with elongate, flattened-subappressed, whitish hairs. Head, thorax, and gaster beset with regular, very coarse, club-shaped hairs.

Ferruginous red, with legs paler.

Female.—(deälated). Length 1.90 mm.

Petiolar node concave at middle of front, with the anterior corners more prominent than in the worker, otherwise similar, excepting the usual sexual differences.

Type locality.—Honduras: Ceiba, Cecilia.

Type.—Cat. No. 24459, U.S.N.M.

Described from a single female and a small series of workers from two colonies taken by breaking apart red-rotten wood.

This species is related to the South American R. ciliata Mayr and R. bolaui Mayr, the latter known only from a female, both of which are much larger in size.

#### RHOPALOTHRIX (RHOPALOTHRIX) GRAVIS, new species.

Worker.—Length 2.30-2.50 mm. (fig. 19).

Head, excluding mandibles, slightly longer than broad, broadly and rather strongly concave behind, posterior portion of sides oblique-

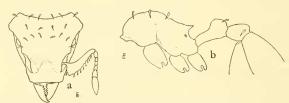


FIG. 19.—RHOPALOTHRIX (RHOPALOTHRIX) GRAVIS, NEW SPECIES. WORKER.

a, Head; b, thorax and petiole. (Only the larger hairs are shown)

ly truncate. Clypeus about twice as broad as long, nearly straight at anterior margin. Mandibles rather stout, outer border very feebly concave at middle, blades with ten teeth. Antennae 7-jointed, their scapes at base a little more than one-fourth as broad as long, the outer angle narrowly rounded; first funicular joint longer than broad, second joint as long as broad, joints 3-4 slightly longer than broad, terminal joint as long as remainder of funiculus less the first joint. Eyes small, strongly convex. Thorax with a very indistinct impression, which does not interrupt the sculpture, in the region of the promesonotal suture and constricted at sides. Sides of pronotum subgibbous. Mesonotum convex in outline. Mesoepinotal suture strongly impressed. Base and declivity of epinotum subequal in length, the surface of the former nearly flat in front and concave between the spines which are half as long as the declivity, broadly triangular in shape, much compressed, directed backward and slightly upward, at base extending as narrow margins to sides of

epinotal declivity. Peduncle of petiole a little longer than the node; node in profile slightly higher than long, abrupt in front and behind and nearly flat above; from above, as long as broad, feebly convex at sides and straight at front and posterior borders. Postpetiole much broader than petiole and more than twice as broad as long, longitudinally concave at middle.

Opaque. Head and thorax punctate and rugulose, epinotum transversely seriolate; petiole, postpetiole and gaster cribately punctate.

Mandibles, legs, and antennal scapes densely punctate.

Subappressed squamiform hairs moderately abundant on head, body, and appendages, sparse on epinotum; longer, clavate hairs on outer border of antennal scapes and the apical portions of legs; coarser, clavate hairs regularly arranged on head, thorax, and abdomen.

Brownish red; legs paler. Female.—Length, 2.90 mm.

Thorax and scutellum rugulose, the former more strongly than in the worker. Epinotal spines a little shorter than in workers. Wings strongly infuscated.

Male.-Length, 2.80 mm.

Head, excluding mandibles, longer than broad, shallowly and broadly excised behind, posterior portion of sides truncate. Clypeus broad, rounded at sides posterior to middle, very feebly concave at anterior border. Mandibles well developed, acute at tips, their blades strongly concave. Eves elongate oval, convex, slightly shorter than their distance to occipital corners. Ocelli large, Frontal lobes prominent, truncate apically. Antennae 13-jointed, first joint twice as broad at base as at apex, twice as broad and slightly longer than the second joint, which is about half as long as the third, joints 3-12 elongate, subcylindrical, terminal joint longer than the penultimate, but shorter than the two preceding joints together. Mesothorax shallowly, longitudinally impressed at middle, shallowly concave behind. Scutellum about as long as broad, little convex, impressed at middle of posterior border. Base and declivity of epinotum equal in length; spines bluntly triangular, a little longer than broad at base, declivity narrowly margined at sides. Petiole elongate, the node rounded above; from above, a little broader than long, rounded at sides and straight in front; anteroventral spine long and pointed, directed forward. Postpetiole transverse and twice as broad as petiole. Gaster rather strongly narrowed behind. External valves of genitalia long and slender, narrowly rounded apically. Legs long and very slender.

Gaster shining, pleurae, in part, and petiolar node feebly shining, the rest opaque. Head and thorax densely punctate and rugulose. Petiole densely and postpetiole more shallowly punctate. Legs finely and densely punctate. Gaster smooth.

Hairs fine, long and black on head and body, shorter and semirecumbent on legs.

Black, legs fulvous, wings strongly infuscated.

Type locality.—Honduras: Lombardia; San Juan Pueblo.

Cotypes.-Cat. No. 24460, U.S.N.M.

## RHOPALOTHRIX (OCTOSTRUMA) BARBERI, new species.

Worker.-Length. 1.75 mm.

Head, excluding mandibles, barely broader than long, half as broad at clypeus as at occiput, posterior portion of sides not distinctly truncated, occipital corners rounded, occipital border shallowly concave at middle. Mandibular blades with four elongate. triangular teeth, tips acute. Clypeus as broad as long, truncate in front, posterior border narrowly rounded. Antennal scapes extending less than two-thirds the distance to occipital corners, their width at base equal to three-eighths their length, expanded and narrowly rounded at base; first funicular joint one and one-third times as long as broad; joints 2-5 strongly transverse, joint six less transverse: terminal joint nearly as long as the remainder of funiculus. Eyes small and feebly convex. Pro-mesonotum rather flat in profile; from above, evenly rounded at sides. Mesoepinotal impression very distinct. Base of epinotum flat, sides straight, spines much shorter than their distance apart at base, compressed, triangular. Petiolar node shorter than the pedicel, from which it rises abruptly. higher than long and higher in front than behind; from above, broader than long, with straight anterior and posterior borders and feebly convex sides. Postpetiole about one and one-half times as broad as petiole.

Opaque, densely cribrately punctate, more rugosely on head.

Claviform hairs sparse on head, thorax, and petiole and tibiae, more abundant on gaster, a row along border of antennal scapes. Short, fine recumbent hairs rather sparse on head, body, and appendages.

Dark reddish brown.

Type locality.—Guatemala: Cacao, Trece Aguas, Alta V. Paz (Barber and Schwarz).

Cotypes.-Cat. No. 24461 U.S.N.M.

This species belongs in the group with balzani Emery and batesi Emery. It is distinct from the first of these in its more elongate antennal scapes, from the second in its much smaller size and from both in having the sides of head behind the eyes less truncated and in the occipital border being narrowly, though very distinctly, concave at middle.

#### RHOPALOTHRIX (OCTOSTRUMA) WHEELERI, new species.

Worker.-Length 2.20 mm.

Head slightly broader than long, sides posterior to eyes truncated, posterior border nearly straight. Mandibles slender, especially at apical half, outer border concave at middle, blades with five strong, elongate triangular teeth. Anterior border of clypeus broadly rounded. Antennal scapes but moderately dilated at base, with the angle broadly rounded; funicular joints 2-5 less than twice as broad as long, joint six longer than broad, terminal joint about as long as remainder of funiculus. Eyes small, little convex. Thorax very feebly arcuate in profile from front to epinotal base; from above rounded at middle of sides in the pronotal portion, sides nearly straight behind. Mesoëpinotal impression entirely obsolete. Epinotal base sloping, on a different plane from the mesonotum and separated from it by a rounded angle, flat, longer than broad and barely longer than the declivity; the two surfaces separated by a transverse carina. Spines broadly triangular, their width at base greater than their length, shorter than their distance apart at base. Petiolar node nearly one and one-half times as broad as long, suboval: in profile higher than long and as long as peduncle. abrupt in front, dorsum feebly convex and sloping from front to rear. Postpetiole about two times as broad as long and one and one-half times as broad as the petiole.

Head and thorax moderately shining, petiole and gaster nearly opaque. Mandibles, antennae and legs finely and densely punctate. Head rugose, fovoelately punctate and with fine striae, some of them reticulate; occipital region more finely punctate. Pro-mesonotum fovolately punctate in front and sides, the median portion and the epinotum and sides exceedingly finely and densely punctate (with an almost velvety appearance). Petiole and postpetiole rugose and coarsely punctate. Gaster cribrately punctate.

Head and body thinly covered with fine, short, silky hairs; front of head with very spart elongated clavate hairs. Hairs on border of antennal scapes stiff, but not clavate. Legs with short and stiff,

suberect hairs, some on tibiae clavate.

Fuscous; legs somewhat lighter than the rest.

Type locality.—Guatemala: Livingstone (Barber and Schwarz). Type.—Cat. No. 24462, U.S.N.M.

Described from one worker.

This is a peculiar species resembling Rh. petiolata Mayr in the absence of the mesoëpinotal impression. The latter species has the antennal scapes strongly dilated at base and the petiolar node is twice as broad as long and the body is opaque.

#### CYPHOMYRMEX COSTATUS, new species.

Worker.-Length 1.50 mm.

Head longer than broad, narrowest in front, broadly concave behind, occipital corners subangulate; occiput at middle with a pair of low rounded, longitudinal ridges, parallel to each other and becoming obselete on the vertex. Clypeus much longer than broad, triangular, nearly flat in front, with the anterior border very faintly concave at middle. Mandibles acute apically, the blades with five short teeth. Frontal lobes nearly flat, each distinctly longer than broad, with the outer border broadly and evenly rounded; continuous with the carinae, which extend straight and divergent to the occipital border. Antennal scrobes broad and deep, bordered beneath by a low, rather thick ridge which is interrupted at middle by the eye. Antennal scapes short, not attaining occipital corners, very slender at basal third, apical portion strongly incrassate; median funicular joints about twice as broad as long; terminal joint long and strongly narrowed at tip. Pronotum feebly convex, sides with a pair of rounded tubercles in back of middle; humeri obtusely angulate; inferior angles blunt, not spinose. Pro-mesonotal suture not impressed. Mesonotum concave, sides with a rather thick margin, which is shallowly impressed a little posterior to the middle. Base of epinotum about as long as the declivity, a little longer than broad, concave at middle, margined at sides, the margins angulate. Petiole shorter and much thinner than the postpetiole, the dorsal surface sloping and highest posteriorly; from above, nearly two times as broad as long, widest in front. Postpetiole one and onehalf times as broad as the petiole, a little broader than long, with two coarse, rounded longitudinal ridges which are a little higher and thicker behind than in front. First gastric segment with four strong and even longitudinal ridges for its entire length, the surface between these slightly convex. Legs short, the flexor surfaces of the posterior and middle femora strongly expanded a little basal to middle; tibiae short and very stout, the anterior pair much shorter than the tarsi, in cross section with the sides meeting at angles.

Subopaque. Finely and densely punctate throughout, with short, recumbent, white hairs moderately abundant on head, gaster and appendages and sparse on thorax.

Yellowish brown, the posterior part of head darker than the rest.

Type-locality.—Honduras: Lombardia. Cotypes.—Cat. No. 24463 U.S.N.M.

Described from three workers found in rotten wood.

This, though evidently a true Cyphomyrmex, is curious in its very short, stubby legs and the very strong carinae on the gaster. The antennal scapes are shorter and much thicker than usual in the genus. C. strigatus Mayr from Brazil has a similarly sculptured gaster, but

is larger and the thorax bears prominent tubercles at sides and one at the middle of pronotum and lacks the longitudinal margins of costatus.

CYPHOMYRMEX RIMOSUS (Spinola), variety MINUTUS Mayr.

Honduras: Ceiba, Lombardia, San Juan Pueblo. San Pedro Sula, Tela.

MYRMICOCRYPTA CUCUMIS, new species.

Worker.—Length 2.50 mm.

Head, excluding mandibles, slightly longer than broad, sides feebly convex, posterior corners rounded, border concave. Mandibles 8dentate. Clypeus little convex, nearly straight at anterior border. Frontal lobes thin, their outer borders rounded. Frontal carinae feeble, nearly straight, divergent, extending nearly to occipital border. Cheeks with a sharply defined, straight carina extending inwardly to the eyes, from near base of mandibles a little less than half the distance to occipital borders. Antennal scapes surpassing occipital corners by a distance a little greater than their diameter at tips; first funicular joint one and one-half times as broad as the second and as long as the second and third together, joints 2-8 slightly longer than broad, penultimate joint less than half as long as the terminal. Eves moderate in size and convex, situated in front of middle of sides of head. Thorax stout, the sutural impression broad and shallowly concave and not interrupting the sculpture. Pronotum flat and sloping in front, the posterior portion a very transverse area, convex at middle and nearly flat at sides, separated from the front by a row of short spines; humeri angulate and shortly spinose; inferior angles with a short, blunt, downward-pointing spine. Mesothorax nearly flat in front and slightly sloping from front to rear, behind more strongly sloping. Epinotum anteriorly with a slightly convex surface that is twice as broad as long; the posterior portion in the same plane as the declevity, thinly margined at sides; at middle with an elongate, bluntly pointed spine that points upward and backward. Petiole short, not pedunculate, in profile but slightly longer than high and thinner behind than in front; from above as long as broad. Postpetiole twice as broad, twice as thick and two and one-half times as long as the petiole; in profile longer than broad, highest in front, with a feebly convex anterior surface which broadly rounds into a long, flat posterior surface; from above, a little longer than broad, broadest at middle, anterior border narowly rounded, sides feebly convex. Gaster in profile thick, the sides obsoletely margined; from above the sides of the first segment are nearly parallel. Legs long and rather slender.

Mandibles sublucid, rather strongly striate and with a few stiff hairs. Head and body densely granulosely punctate and in addition beset with short, thick spines, which are truncated at tips and bear each a strongly curved, elongate, flattened hair. These spines are regularly arranged, sparsely and mostly on the margin of the thorax, though there is a transverse row on the pronotum and three pairs inward from the marginal row on the mesonotum.

Appendages densely punctate and with suberect, rather stiff hairs.

Color reddish brown.

Female.—(deälated). Length 3.10 mm.

Head similar to that of worker, but with longitudinal rugae on front. Pronotum with short and stout humeral spines. Mesothorax nearly as broad as long, its surface flat. Scutellum a little broader than long, strongly excised posterior border, with nearly straight, convergent sides that terminate in stout spines and project laterally. Epinotal base and declevity not distinct from each other, with short, very broad lateral spines. Petiole and postpetiole similar to those of worker.

Granulose, punctate and opaque, mesothorax and scutellum with short, longitudinal rugae. Spines somewhat shorter than in the worker; lacking on the thoracic dorsum.

Curved hairs moderately abundant on head, thorax and append-

ages.

Color as in worker.

Type locality.—Honduras: Progresso. Type.—Cat. No. 24464, U.S.N.M.

MYRMICOCRYPTA EDNAELLA, new species.

Worker.—Length 2-2.25 mm. (fig. 20).

Head one-fourth longer than broad, slightly narrowed in front, sides little convex, occipital corners subangulate, border nearly straight; vertex rather strongly impressed at middle between the frontal carinae, occiput with three smaller impressions, the outer two of which are bordered by fine carinae. Mandibles long and pointed, 6-dentate. Clypeus broadly rounded at anterior border, median portion elevated and margined at sides. Frontal lobes short and rather thick, carinae parallel to nearly opposite anterior border of eyes, then arcuate and bordering vertical impression and extending on occiput. Eyes small, convex, situated at middle of sides of head. Postorbital carinae fine but distinct, extending to occipital corners. Antennal scapes rather stout, slightly surpassing occipital corners; first funicular joint a little shorter than joints 2-3 together, second joint barely broader than long, joints 3-8 a little longer than broad, terminal joints shorter than the three joints preceding. Pronotum nearly flat in front, more concave behind, divided by a very obtuse angle into two surfaces, the anterior of which has at sides thick margins that terminate as broadly triangular spines, and the posterior by more approximate, finer carinae, which are dentate bluntly in front and extend in a concave curve on the sides of the mesothorax where they are bidentate; humeral spines short and blunt. Mesoëpinotal impression strong, bordered by a continuation of the pro-mesothoracic carina. Base of epinotum flat, quadrate, much longer than broad, shorter than the declivity, both surfaces with thin lateral margins which bear triangular spines at the angle. Petiolar peduncle longer than the node, anteroventral spine very small, node in profile rounded in front, flat and sloping above; from above, longer than broad, rounded in front and concave at posterior border. Postpetiole more than twice as broad and a little longer than the petiolar node, broadest behind. Gaster rather flat above, especially basally; margined at sides.

Densely granulose-punctate and opaque. Mandibles punctate and

striolate and subopaque.



Fig. 20.—Myrmecocrypta ednaella, new species. Worker. a, Head; b, thorax and detiole,

Hairs on head and body short and clavate, moderately abundant and regularly arranged on head, postpetiole, and gaster, sparse and only on ridges of the thorax, epinotum, and petiole, with half a dozen on anterior portion of pronotum. Appendages with abundant strongly-curved semirecumbent squamiform hairs.

Yellowish brown to dark reddish brown. Pilosity white.

Female.—(deälated). Length 3.10 mm.

Head resembling that of the worker; ocelli small. Pronotum with broadly triangular, horizotal humeral spines and much larger and thicker spines at middle of side margin. Mesonotum irregularly margined at sides and with a pair of parallel ridges on median surface. Scutellum broader than long, carinate at middle, the surface on either side depressed and flattened, posterior margin projecting horizontally as strong, blunt teeth, sides margined, the margins on front elevated as large, broad spines rounded at tips. Epinotal spines stronger than in worker.

Sculpture similar to the worker except that the occipital region

of the head and the thorax bear irregular striae.

Type locality.—Honduras: Lombardia. Cotypes.—Cat. No. 24465, U.S.N.M.

Described from two females and a small series of workers taken from colonies beneath stones. The fungus gardens are pendulous, hanging from the underside of the stones into little pockets, which evidently are excavated by the ants. They are small in size—a little smaller and somewhat the same shape as a thimble. There are few individuals in a colony.

The three impressions on the occiput, margined by the ridges. which give the border superficially the appearance of being bicon cave, and the form of the frontal carinae are very characteristic.

# MYCOCEPURNS SMITHI Forel, variety TOLTECA Wheeler.

Honduras: Ceiba.

#### SERICOMYRMEX OPULENTA, new species.

Worker.-Length 4 mm. (fig. 21).

Head, excluding mandibles, slightly longer than broad, broadest at middle of sides; occipital corners projecting as strong, triangular,



Fig. 21.—Sericomyrmex opulenta, new species. Worker, a, Head; b, thorax and petiole.

rather bluntly pointed spines, from the bases of which thick ridges extend to the frontal lobes. Occipital groove strong, extending down vertex to opposite the frontal lobes and bordered basally by ridges which half way down curve outwardly and join those which extend from the occipital spines. Sides nearly straight, behind terminating as short, blunt spines. Mandibles elongate, their blades with eight short teeth, outer border distinctly concave at middle. Frontal lobes large, widely separated, elevated, and thickened laterally; the surface between their posterior halves elevated and with two short, poorly defined ridges. Eyes large. Antennal scrobes strong, bordered outwardly by their carinae, which extend from in front of the eyes four-fifths the distance to occipital border, and inwardly by the thick

ridges from the bases of occipital spines to the frontal lobes. Antennal scapes extending a little beyond the tips of occipital spines; funiculus slender, gradually and feebly thickened apically, first joint slightly shorter than the second and third together, all joints much longer than broad and increasing in length toward the tips, terminal joint slender, longer than the two preceding joints together. Pronotum broader than long, narrowed in front, surface sloping in front, sides with a pair of blunt tubercles near posterior margin, inferior angles with elongate, bluntly pointed spines. Mesothorax with three pair of thick spines, the first more than twice as long and much stouter than the intermediate pair, which are twice as large as the posterior pair. Mesoepinotal suture strongly and broadly impressed. Base of epinotum about as long as the declivity, bordered by a pair of low, irregularly denticulate ridges, which terminate as short, compressed, bluntly pointed spines; declivity broad and nearly flat. Petiole in profile longer than high, convex above, sides with a short longitudinal ridge; from above longer than broad, very slightly broader in front than behind, with a pair of narrow, lateral ridges at posterior half. Postpetiole nearly twice as broad as petiole, broader than long, broadest behind, strongly and broadly longitudinally grooved above. Gaster with a series of four longitudinal ridges. Legs long and slender.

Opaque. Mandibles feebly shining, densely striate basally. Head and body densely punctate and unevenly rugose. Appendages

densely punctate.

Body and appendages with abundant long, fine hairs which are black basally and white toward the tips. These are stiffer, less erect, and curved on the appendages. Appendages also with recumbent, very fine and silky golden pilosity.

Reddish brown to dark reddish brown.

Type locality.—Honduras: San Juan Pueblo.

Tupe.—Cat. No. 24466, U.S.N.M.

Described from a series of workers taken in a large colony. The nest was in the ground, alongside a trail in thick woods. The entrance was in the form of a turret, loosely constructed of earth and about 6 inches in height; a foot beneath the surface was a large cavity, containing a fungus garden, pendulous and 4 or 5 inches in diameter.

The arrangement of the tubercles is somewhat similar to that in S. sausaueri Emery, which species, however, has but two pair on the mesonotum and also has shorter epinotal spines, but otherwise S. opulenta is very different from the other described species of Serio-comurmex.

#### APTEROSTIGMA ABDITA, new species.

Worker.—Length, 3 mm. (fig. 22).

Head, excluding mandibles, nearly one and one-half times as long as broad, with nearly straight, subparallel sides, and broadly rounded occipital corners; posterior portion suddenly contracted into a short neck which has a distinctly reflected border. Front with a rather strong impression, bordered by the frontal carinae. Clypeus much broader than long, anterior border feebly rounded. Frontal lobes large and thick, with a strong impression between. Mandibles with a series of twelve teeth, the apical two largest. Antennae stout. their scapes surpassing the occipital corners by about one-fourth their length; first funicular joint a little longer than the second and third joints together; joints 2-10 very slightly broader than long; penultimate joint distinctly broader than long; terminal joint about as long as the four joints preceding. Eyes convex, situated posterior to middle of sides. Pro-mesothorax strongly convex in profile; anterior border elevated into a low, thick ridge. Mesonotum with a pair of rather indistinct, thick, longitudinal ridges. Base of epino-



Fig. 22.—Apterostigma abdita. Thorax and petiole of worker.

tum feebly convex, longer than the flat declivity and broadly rounding into it. Epinotal stigmata prominent. Petiole from above more than twice as long as broad, widest behind and gradually narrowing to the

stigmata; posterior third with a pair of short and blunt ridges; in profile the node is low and rounded, with rather abrupt, nearly straight posterior slope. Postpetiole a little broader than long, broadest behind, the slightly convex sides gradually converging anteriorly; posterior border very feebly excised and the dorsum indistinctly impressed. Gaster short and elliptical, the first segment margined at sides by an obtuse ridge.

Mandibles very finely and densely striate and shining; antennal funiculi feebly shining; head and body opaque, finely and densely, somewhat granulosely punctate; legs punctate similar to body.

Pilosity abundant, on the head and body long and flexuous, on the legs and scapes shorter, curved and subappressed. On the legs and scapes there are also some longer hairs, similar to those on the body.

Color brown.

Female.—(deälated). Length 4 mm.

Pro-mesonotum strongly convex in profile. Scutellum rather flat; posterior border concave at middle, with broad, obtuse teeth laterally. Epinotal base and declivity not distinct from each other, margined at sides, the margin obtusely angulate at middle. The rest as in worker, with the usual sexual differences.

Type-locality.—Honduras: San Pedro Sula, San Juan Pueblo. Cotypes.—Cat. No. 24467, U.S.N.M.

Described from a large series of workers and one female, collected from nests in rotten wood.

This species is near mayri, differing from it in the more slender petiole and in having the hairs on the scape curved at the tips toward the surface, instead of being straight and obliquely divergent.

### APTEROSTIGMA COLLARE Emery.

Honduras: Lombardia, San Juan Pueblo, Choloma, Tela, San Pedro Sula.

An abundant species occurring in moderate-sized colonies in rotten wood

# ATTA CEPHALOTES (Linnaeus).

Honduras: Generally distributed and abundant.

I saw comparatively little damage done to citrus by this ant in Honduras. In several native plantations files of workers were busy cutting the leaves, but no trees had been completely defoliated. The one large commercial plantation (at Ceiba) seemed to be free from the ants. Other plants were badly attacked, and I saw one patch of young cocoa trees entirely stripped of leaves. The Hondurian name for this species is "wee-wee."

# Subfamily Dolichoderinae.

DOLICHODERUS (HYPOCLINEA) LUTOSUS F. Smith.

Honduras: Choloma, Lombardia.

At Choloma this species was nesting in the hollowed parts of pine trees.

There is a great deal of variation in color among the workers, more especially in the amount of infuscation on the gaster, but in all specimens the apical borders are distinctly darker than the remainder.

# ACTECA INSTABILIS F. Smith.

Honduras: Cecilia, San Juan Pueblo, Progresso.

AZTECA INSTABILIS F. Smith, variety MEXICANA Emery.

Honduras: Choloma.

One colony found in a hollow stump of a pine tree.

#### AZTECA ALFAROI Emery.

Honduras: Choloma, Ignacio.

This is the species most common in a local Ceeropia (the "Guaruma," of the Hondurianians), where it occurs in large colonies. In one instance I collected from one Cecropia seven dealated females of

alfaroi, each in a separate cavity, and one of them with an incipient

colony.

Coccidae live in the cavities and are tended by the ants, as first recorded by Belt in his "Naturalist in Nicaragua." There were also, in Honduras, dipterous pupae, probably Phoridae, in with the ants. Those which I found had been parasitized by a small undetermined Hymenopterous pupae of which were found in the fly puparia.

# Subfamily FORMICINAE.

# ACROPYGA (RHIZOMYRMA) WHEELERI, new species.

Worker.-Length, 1.50 mm.

Head subrectangular, a little longer than broad and as broad in front as behind, with very feebly convex sides, occipital border shallowly excised at middle. Clypeus convex, truncate at anterior border. Frontal area distinct and triangular. Mandibles with distinct basal and apical borders, blades with three strong, triangular teeth, the apical the largest and the basal the smallest. Eyes small. composed of one facet, situated at anterior third of sides of head. Antennae 9-jointed, scapes attaining occipital border; first funicular joint as long as the second and third together, joints 2-5 strongly transverse, joints 6-7 about as long as broad, terminal joint compressed, nearly as long as the three preceding joints together. Thorax robust. Pronotum broader than long, broadest behind middle, sides rounded. Mesonotum longer than broad and about as long as pronotum. Base of epinotum more than twice as broad as long at middle, in profile about one-fourth as long as the sloping declivity into which it gradually rounds. Scale well developed. erect. less than half as long as the epinotal declivity and more than half as broad, compressed anteroventrally and with flattened surfaces, dorsal border rounded.

Shining, delicately shagreened. Hairs very fine, short and abundant on head, longer and sparser on the body.

Pale brownish yellow throughout, except the mandiblar teeth, which are brown.

Hairs yellow.

Female.—(deälated). Length, 2 mm.

Head shorter than in worker. Second funicular joint longer than broad and joints 4-5 less transverse than in the worker. Scale rather thick in profile.

Eyes and ocellar patch brown.

The remainder similar to worker, with the usual sexual modifications.

Type locality.—Honduras: Lombardia. Cotypes.—Cat. No. 24468, U.S.N.M.

In the small size of the eyes and in the collapsible nature of its tegument, wheeleri resembles exanguis Wheeler from Mexico. The latter species has the mandibles more slender and without indication of basal and apical borders, the apical antennal joints are broader than in wheeleri, and the body, except the anal segments of the gaster, is devoid of erect pile, but is covered with rather sparse pubescence.

PRENOLEPIS (NYLANDERIA) STEINHEILI Forel.

Honduras: Lombardia, Tela.

CAMPONOTUS (MYRMOTURBA) ABDOMINALIS (Fabricius), subspecies STERCORARIUS Forel.

Honduras: Ceiba.

Nesting at bases of coconut fronds.

CAMPONOTUS (MYRMOTURBA) ABDOMINALIS (Fabricius).

Honduras: Tela, San Juan Pueblo.

CAMPONOTUS (MYRMOTURBA) ABDOMINALIS (Fabricius), subspecies STERCORARIUS Forel.

Honduras: San Pedro Sula, Choloma.

CAMPONOTUS (MYRMOBRACHYS) LINDIGI Mayr.

Honduras: Choloma.

CAMPONOTUS (MYRMOCRACHYS) PLANATUS Roger.

Honduras: Ceiba, San Pedro.

Nests in hollow twigs and is especially abundant in scrub growth along the edge of forests and in clearings.

CAMPONOTUS (MYRMOMBLYS) CLAVISCAPUS Forel variety SUBCARINATUS Forel.

Honduras: Ceiba, Choloma, Lombardia.

Nesting, similar to typical form, in hollow twigs.

CAMPONOTUS (MYRMOMBLYS) NOVAGRANADENSIS Mayr.

Honduras: Lombardia, Ignacio, Cecilia, Tela, San Pedro Sula. Nests in hollow twigs.

CAMPONOTUS (MYRMOPONIS) SERICEIVENTRIS Guerin, subspecies REX Forel.

Honduras: Ceiba, Lombardia, Carmelina, Progresso, Tela.

This species is especially conspicuous about recently felled trees.

CAMPONOTUS (MYRMORHACHIS) RECTANGULARIS Emery.

Honduras: San Juan Pueblo.

CAMPONOTUS (MYRMORHACHIS) QUADRILATERUS Mayr, variety HONDURIANUS, new variety.

Worker.—Length 3.75 mm.

Differing from the typical form (compared with a specimen from Bolivia, ex. coll. Emery) in the color of the legs, which have the mid-

dle and hind coxae, trochanters and base of tibiae bright lemon yellow, the anterior tibiae, the tarsi, and the antennae (except the apical third of funiculus) are light yellow brown.

Type locality.—Honduras: Carmelina. Cotypes.—Cat. No. 24469, U.S.N.M.

A single small colony found in hollow twig.

The color of the soldier is similar to that of the worker and probably differs in the same way from that phase of the typical quadrilaterus.

#### DENDROMYRMEX FABRICH Roger.

Honduras: Ceiba.